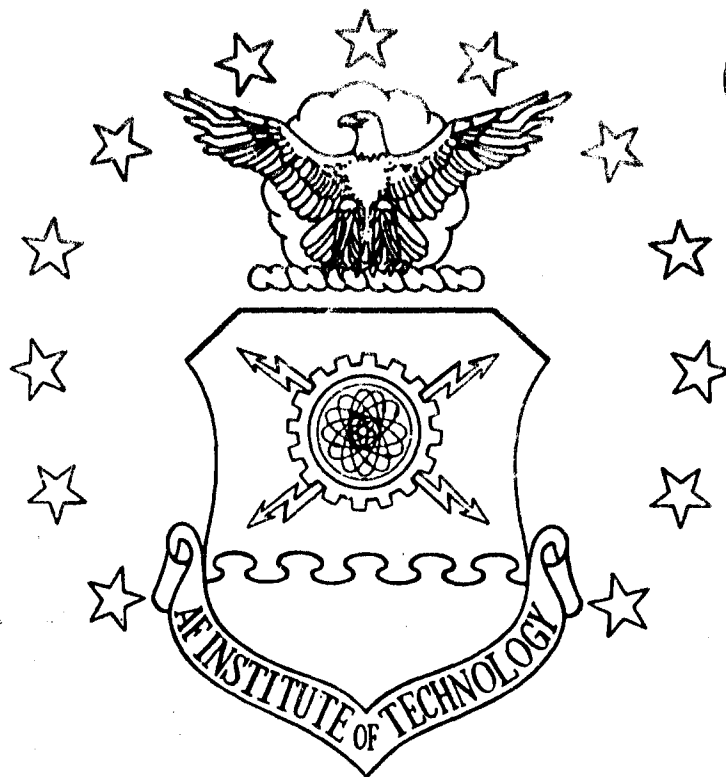
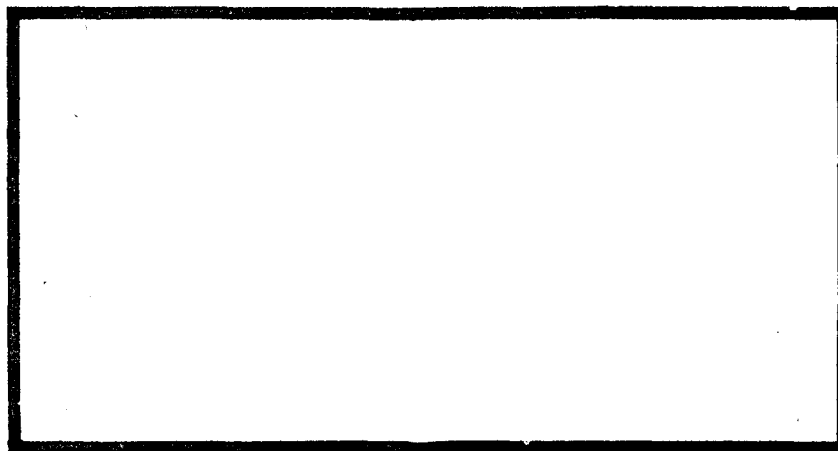


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MODELLING CAREER INTENT OF SPECIFIC
AIR FORCE PERSONNEL CATEGORIES

Gerald M. Lazar, Captain USAF
Michael B. Maloney, Captain USAF

LSSR 68-82

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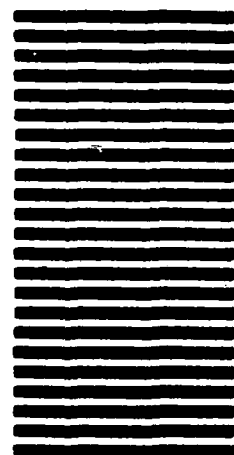
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER LSSR 68-82	2. GOVT ACCESSION NO. AD-A123 063	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) MODELLING CAREER INTENT OF SPECIFIC AIR FORCE PERSONNEL CATEGORIES		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Gerald M. Lazar, Captain, USAF Michael B. Maloney, Captain, USAF		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS School of Systems and Logistics Air Force Institute of Technology, WPAFB OH		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Department of Communication and Humanities AFIT/LSH, WPAFB OH 45433		12. REPORT DATE September 1982
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 187
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES APPROVED FOR PUBLIC RELEASE: LAW AFR 190-17 LYNN E. WOLAVER Dean for Research and Professional Development AIR FORCE INSTITUTE OF TECHNOLOGY (ATC) WRIGHT-PATTERSON AFB, OH 45433 2 SEP 1982		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Career Intent, Turnover, Retention, Modelling		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Thesis Chairman: Russell P. Lloyd, Major, USAF		

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→ The Air Force continues to experience turnover problems. Research has shown that a person's intent to leave an organization is highly correlated with the act of leaving. In an effort to identify those factors that predict the career intentions of USAF officer and enlisted personnel, this study analyzed the responses of 16,000 Quality of Air Force Life surveys completed between 1977 and 1980. Categorical prediction models were developed for eight different USAF groups, based on job specialties. The results indicate prodigious differences between the factors that predict a person's career intent for any of the eight categories studied. The results also indicate major changes occurred in the predictive factors between 1977 and 1980. The findings for enlisted personnel correlates closely with the results of a 1981 Airmen Exit Survey which identified pay, supervisor sensitivity, and promotion opportunities as the major reasons for leaving the Air Force. ←

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MODELLING CAREER INTENT OF SPECIFIC
AIR FORCE PERSONNEL CATEGORIES

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Logistics Management

BY

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September 1982

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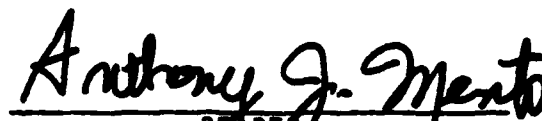
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has been accepted by the undersigned on behalf of the
Faculty of the School of Systems and Logistics in partial
fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN LOGISTICS MANAGEMENT

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ACKNOWLEDGEMENTS

We would like to thank Major Russell Lloyd, our research advisor, and Dr. Tony Mento, our reader, for their assistance, guidance, and constructive suggestions throughout this endeavor. Their attention to detail and enduring patience helped bring order out of chaos. We are also grateful to Dr. Charles McNichols for his invaluable help with the multitude of computer programs necessary for this research effort.

A very special thanks goes to Amy Lazar who's beautiful job of typing turned a mass of paper into a nice, neat, finished product.

Our families deserve extra special credit for enduring the endeavor right along with us. It has not been easy for them and we appreciate their love and patience.

Finally, we wish to thank God for giving us strength, love, and peace.

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CHAPTER I

INTRODUCTION

Background

With the demise of the draft in 1973, the United States Military entered a new era characterized by the All Volunteer Force (AVF). With increased reliance on volunteers to provide the required manpower for the nation's military services, the problem of "strength maintenance" became a paramount issue. The main presumption of the AVF was that, with longer-term enlistments and professionally committed service members, personnel turnover would be greatly reduced (Moskos, 1977). This has not been the case, resulting in a structural weakening of the United States defense capability ("AFA Policy Paper," 1979).

Traditionally, a military man or woman who reenlisted or an officer who elected to stay on past his or her initial obligation was likely to be a careerist ("AFA Policy Paper," 1979). This is no longer true. Trained middle managers, currently the layered area where the greatest manpower shortages exist in the Air Force (AF), are departing in increasing numbers. Recruitment and retention problems now affect the entire spectrum of manpower, both officer and enlisted.

The severity of recruiting and retention problems has been less for the AF than the other services ("AFA Policy Paper," 1979). Nevertheless, the AF faces the most serious manpower problems in its history ("AFA Policy Paper," 1979). Among officers, the most critical retention problems are with pilots, navigators, scientists and engineers, and medical personnel.

For the past few years, AF pilots and navigators have been leaving the military in record numbers as they opt for more lucrative jobs in private industry (Davis, 1981). Current retention rates are 42 percent for pilots and 62 percent for navigators, resulting in projected shortages for Fiscal Year (FY) 83 of 1732 and 865 persons respectively ("Officer Retention Up," 1981). Despite recent improvements in military compensation and a decrease in the number of attractive civilian jobs, shortages of rated members remain.

Scientific and Engineering (S&E) officers are in great demand for their expertise in both the Air Force and the civilian marketplace. Many jobs in private industry typically tend to offer much better salaries and benefits than the military. The S&E officer shortage is presently reducing America's military preparedness and may eliminate our technological edge over the Soviet Union ("Scientist Shortage," 1982). This shortage has also caused a severe drop in the experience level among active duty S&E officers. Currently there is a shortage of

middle managers (Captains and above) and an overage among the relatively inexperienced Lieutenants (Gates, 1980). The present retention rate for S&E officers is 47 percent and a shortage of 1127 S&E officers is predicted in FY 83. The greatest shortages are in Developmental Engineering, Communications-Electronics, and Civil Engineering. In a comprehensive study ordered by the Undersecretary of Defense Research and Engineering, it was predicted that the national shortfall of engineers will total 114,000 over the next ten years ("Scientist Shortage," 1982).

Air Force physicians are also in short supply due to the attractiveness of higher paying civilian jobs. Currently, the AF is experiencing manning problems in eleven medical specialties. Of these the most severe shortages are in Surgery, Urology, Hematology/Oncology, Rheumatology, and Neonatology. In these areas shortages range from 26 to 27 percent of authorized manning (Bircher, 1981).

In the enlisted ranks, recruiting and retention problems are distributed across many skills and grades, especially in the five and seven skill levels. In some areas the shortages have seriously impaired the ability of the Air Force to accomplish its primary mission, defense of the United States and its' allies. For example 80 percent of the current shortage of 11,300 are in the Aircraft Maintenance Air Force Specialty Codes (AFSCs) (Newman, 1981). The Air Force maintains

a Chronic Critical Shortage (CCS) list which includes those AFSCs deemed to be critically short of people, thus significantly impacting mission capability. Presently there are 65 AFSCs on the CCS list (Newman, 1981).

In a recent Airman Exit Report Survey conducted by AF Military Personnel Center (AF MPC), 1052 airmen leaving the service between January and March 1981 reported their reasons for separating ("Air Force Military Center," 1981). Eighty percent of those exiting were first term airmen and 67 percent of these airmen were in the grade of E-4. The report indicated three dominant issues contributing to the separation decision: perceived higher pay in civilian jobs, dissatisfaction with AF pay, and low job satisfaction.

The increasing awareness of the "plight" of the military and its effect on national security has resulted in Congressional and Presidential efforts aimed at improving recruiting and retention. General Lew Allen, Jr., USAF Chief of Staff made the following comments:

It is clear that the nation paid a severe price, in the form of losses of experienced personnel, for allowing military pay to erode to levels unacceptable for many career servicemen. I hope that this lesson has been well understood and that the needs of military members and their families will be better tended... This renewed public interest has been demonstrated by the present Administration's commitment to rebuild the American defenses. These commitments are reflected in the large scale defense improvements currently being initiated. The first and foremost priority must be oriented toward attracting and retaining quality people. Dedicated and committed professionals are the essential foundation of a strong and ready combat force (Allen, 1981).

Despite a new awareness of military retention problems at executive levels, and despite new programs and incentives, projections call for continued shortages in many critical areas. As new and more complicated weapon systems enter the inventory, the demand for the quality and number of people to operate and maintain them will increase. In order to meet the increased requirements of the future, the Air Force will have to achieve extraordinary retention and recruiting levels and receive support from all levels of government.

Problem Statement and Research Objectives

An urgent need exists to determine the causes of qualified officer and enlisted personnel turnover in the Air Force. For our purposes, career decision is defined as the decision to voluntarily remain in or withdraw from a military career. Therefore, the objectives of this study will be to: (1) determine the factors that have influenced the career decision of qualified officers; specifically pilots, navigators, scientists and engineers, and medical personnel; (2) determine the factors that have influenced the career decision of qualified enlisted personnel in certain aircraft maintenance specialties; (3) identify what factors within each of the above personnel categories have changed between 1977 and 1980; and (4) make recommendations based on the findings on this study.

Justification for the Research

One of the main presumptions of the All Volunteer Force was that, with longer term enlistments and professionally committed service members, there would be less personnel turnover than in a military system which was heavily reliant on conscriptees and draft motivated volunteers (Moskos, 1977). This has not been the case. The trend has been just the opposite, involving low recruitment rates and increasingly higher turnover rates. When viewed in relation to our nation's declining manpower pool, the problem intensifies.

It is estimated by 1985 that the number of eighteen-year-old males will have declined by more than 300,000, which is 15 percent less than in 1976. By 1992, the decline is projected to be more than 500,000, which is 25 percent fewer than in 1976 (Davis, 1981). This means the Department of Defense (DOD) will be in greater competition with industry, thus generating more complex demands on our nation's armed forces in the coming years. It is essential to gain an understanding of those factors contributing to this unacceptable level of military attrition in critical officer and enlisted areas.

Assumptions and Limitations

Assumptions. The assumptions on which this research is based include the following:

Assumption 1. Career intent is dependent on a

relatively small number of variables which can be isolated from a large set of variables by statistical analysis.

Assumption 2. The survey respondents were responsible people and their responses to the survey questions were honest, valid, and unbiased.

Assumption 3. Those completing and returning the survey are representative of the total Air Force population. Most of the personnel categories involved in this study were represented by sample sizes in excess of 100, which should negate most of the problems associated with small samples ($n < 100$).

Limitations. As with any research effort, this one may be affected by certain limitations. One limitation results from the fact that survey respondents can only answer the questions asked with the response alternatives provided. These answers may not reflect the respondent's exact or true feeling, attitude, or opinion.

Although most of the personnel categories studied were represented by large sample sizes ($n > 100$), there were exceptions. From a total of 16 samples (eight categories for each of two years, 1977 and 1980), eight samples were small ($n < 100$). Chapter III delineates the method employed to minimize some of the problems associated with small sample sizes.

Individuals taking the survey were guaranteed anonymity. While advantageous as an inducement for open, frank, and honest responses, it prohibited any follow-up data collection, i.e., did the member leave or stay in the service?

CHAPTER II

LITERATURE REVIEW

Introduction

People join organizations for many reasons and often withdraw from these organizations for equally as many reasons (LaRocco, 1977). In the study of organizational science, turnover is categorized as a type of withdrawal behavior resulting in an individuals complete separation from an organization (Albanese, 1981). This study focuses on voluntary, self-initiated turnover rather than on organization-initiated terminations. Price defines voluntary turnover as, "...individual movement across the membership boundary of a social system which is initiated by the individual" (Price, 1977). In the context of this study, the term "turnover" will be synonymous with voluntary turnover.

Due to the significant impact on the organization, turnover has been the topic of many research studies (LaRocco, 1977; Martin, 1979, 1980; Mobley, et al., 1978). Most of these studies examined the various factors causing turnover. Generally, turnover has a negative effect on the organization (Lawler, 1971). Additional expense and loss in productivity often result since replacements must be recruited, trained,

and given time to gain proficiency on the job. The cost of hiring and training a new employee may range from approximately \$1000 for a clerk to nearly \$500,000 for a combat ready fighter pilot (Kraut, 1975).

This chapter discusses several important aspects of current turnover research. First, the issue concerning the use of career intent as a valid criterion variable in turnover studies is discussed. Second, several prominent models which have been proposed for predicting employee turnover are presented along with supportive evidence from the literature. Finally, relevant DOD reports and research in the area of voluntary turnover are discussed.

Career Intent

Intent to remain or career intent is a behavioral attitude that expresses the degree to which an individual plans to remain a member of an organization. In recent years increasing numbers of predictive studies have used career intent as a substitute for actual turnover (Jamal, 1981; Martin, 1977, 1979, 1980; Nicholson, Wall and Lischeron, 1977; Shiflett, 1980; Young, 1980). As a result of this research, considerable evidence attests to the predictive power of career intent over other variables. Studies examining the relationship between intention and actual behavior found significant correlations between expressed intentions and consequent actions (Alley and Gould, 1975; Kraut, 1975).

Martin (1980) contends there are three reasons that justify the use of career intent as a surrogate for actual turnover. First, career intent has been shown to be a reliable predictor of turnover in numerous research efforts (Atchinson and Lefferts, 1972; Shenk and Wilborn, 1971; and Price and Bluedorn, 1977). Second, the use of career intent in research is less expensive than collecting actual turnover data. Intent to leave is an attitudinal variable which can be collected spontaneously by a questionnaire or interviews over time. The cost incurred are in questionnaire preparation and collection and in data analysis and reporting. Finally, career intent is an appropriate criterion because it allows management to identify and change controllable factors which result in turnover.

In response to a questionnaire asking if career intent is a good surrogate of actual turnover, Dr. William Alley, Chief of the Force Utilization Branch, AF Human Resources Laboratory, Brooks AFB Texas, replied:

Yes, particularly if the time intervening between intentions and actions is short. We have found significant predictive relationships as long as three years prior to the reenlistment point. Things are even better at two years and better yet at one year or less. In some ways career intent is a more desirable measure to use than actual turnover. It is clearer to interpret because it represents the individual's inclination to remain. Actual decisions often include other considerations external to the incumbent (e.g., AF policies, economic trends, etc.) which could hinder clear interpretation of the findings (Alley, 1982).

Nicholson, et al. (1977) also support the use of career intent as a criterion variable. By treating intent as an attitudinal variable, they argue that the measure focuses on the motivation to leave. Since people consider whether or not to leave an organization much more frequently than the actual occurrence, it is beneficial to look at this individualistic attitude in order to identify and change influencing factors.

During the Stoloff, Lockman, Allbritton, and McKinley (1972) study of the reenlistment intentions of first term Navy enlistees it was found advantageous to use career intent when faced with time constraints. Since only a small number of enlistees face the reenlistment decision at any one time, the research would have had to span a year or more so that sufficient data could be collected. To overcome this delay, Stoloff and associates decided to substitute the reenlistment intention as the dependent variable. They felt it was suitable since it was "equally predictable and tended to be explained by more or less the same factors as reenlistment behavior when both measures are available," (Stoloff, et al., 1972). Similarly, Young's (1980) study employed career intent as the criterion in a turnover study with data collected from the 1977 and 1980 Air Force Quality of Life Survey (McNichols, Manley, and Stahl, 1980).

Summary. Research has shown the usefulness of career intent as a surrogate for turnover. Justification for utilizing

career intent as the dependent variable can be based on the predictive records of past studies, the associated cost/saving benefit, time constraint considerations, and the availability of actual turnover data. It is the contention of the authors that career intent is an acceptable alternative to actual turnover and might be used since managers are concerned with identifying and changing those factors which influence turnover.

Theoretical Models

For many years researchers and managers have been interested in the antecedents or determinants of turnover. Most of the empirical research has focused on demographic variables and job satisfaction as correlates of turnover (Mobley, 1982). The behavioral research has established a consistent, although generally weak, correlation between job satisfaction and turnover (Brayfield and Crockett, 1955; Locke, 1976; Porter and Steers, 1973; and Vroom, 1964). A number of authors have advocated abandoning continuation of this bivariate empirical approach since it is conceptually simplistic and empirically deficient for understanding the employee turnover process (Mobley, et al., 1979). Emphasis has recently focused on the development of conceptual models of the process of turnover in an attempt to move beyond the satisfaction-turnover relationship. A number of authors have developed conceptual models of turnover as a process. They include

March and Simon (1958), Mobley (1977), Mobley et al. (1979), Price (1977), Steers (1977), and Martin (1979). These authors integrate the broad spectrum of antecedents and interrelationships into explanatory concepts which help to better understand the elements involved in the turnover decision. These models are the subject of this chapter.

March and Simon's Model. The Participation Model presented by March and Simon (1958) centers around the postulate of organizational equilibrium. This postulate states that a participant will continue participation in an organization only as long as the inducements are greater than the expected contributions (March and Simon, 1958). Inducements are payments made by the organization to its participants in the form of wages. Contributions are payments the participant makes to the organization in the form of work. It is postulated that as the balance of inducements increase over contributions, there is a decrease in the propensity of the individual to leave the organization. A decrease in the inducements over contributions is believed to have the opposite effect.

The inducement-contribution balance is a function of two major components: perceived ease of movement from the organization and the perceived desirability of leaving the organization.

March and Simon assumed that the perceived ease of movement for a worker depends on the availability of jobs that he is qualified to work. The greater the number of perceived extraorganizational alternatives, the greater the perceived ease of movement from the organization. Extraorganizational alternatives are defined as the number of organizations a worker could be employed at. Factors that influence the perceived extraorganizational alternatives available to the worker are (March and Simon, 1958): (1) level of business activities; (2) perceived availability of outside alternatives; (3) visibility of the participant to other organizations; (4) propensity to search; (5) number of organizations visible to the participant; and (6) personal characteristics of the participant.

March and Simon felt that an individual's perceived desirability to leave an organization is a function of his/her job satisfaction and the perceived possibility of intraorganizational transfer. It is believed that the greater the individual's job satisfaction, the less the perceived desirability of movement. Job satisfaction is influenced by three factors: conformity of the job to the self characterization held by the individual, predictability of instrumental relationships on the job, and compatibility of work requirements with the requirements of other roles (March and Simon, 1958). It is also assumed that the greater perceived possibility of

intraorganizational transfers, the greater the perceived desirability of movement. The possibility of intraorganizational transfer is influenced by the size of the organization (March and Simon, 1958). The larger the size of the organization, the greater the possibility of an intraorganizational transfer.

Figures 1a and 1b illustrate the two major components of the model and the factors which influence each.

Studies directly evaluating March and Simon's model are nonexistent in the literature. However, there is extensive empirical evidence supporting many of the concepts posited in the model. The work of March and Simon laid the foundation for many of the turnover models found in the literature today. These models have incorporated many of the concepts described by March and Simon (Mobley, 1977, 1978, 1979; Martin, 1979).

Mobley's Models. Mobley's models of the employee withdrawal process were motivated by a study of Porter and Steers (1973) in which they concluded that more emphasis was needed on the psychology of the withdrawal process (Mobley, 1977}. In agreement with this conclusion, Mobley proposed a heuristic model depicting the employee withdrawal decision process which identifies a variety of possible precursors of employee turnover. The model is illustrated in Figure 2a. The model suggests that there are a number of possible mediating

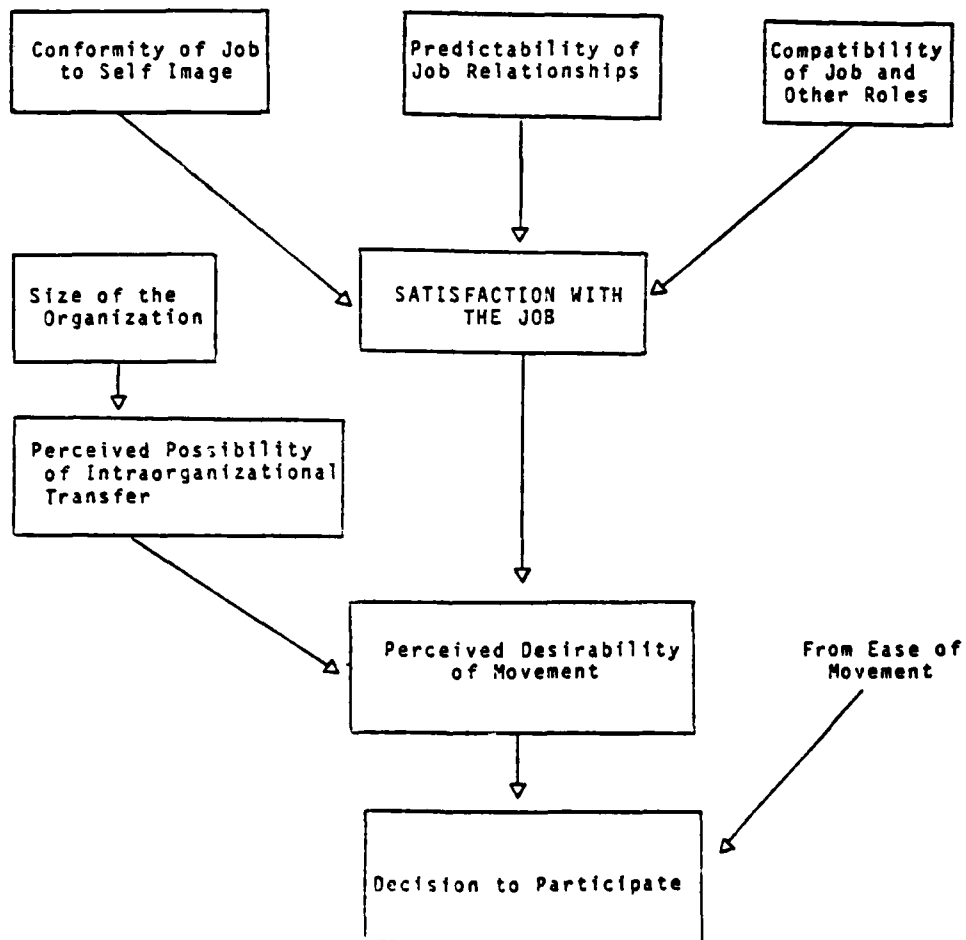


Figure 1a: Major Factors Affecting Perceived Desirability of Movement (March and Simon, 1958)

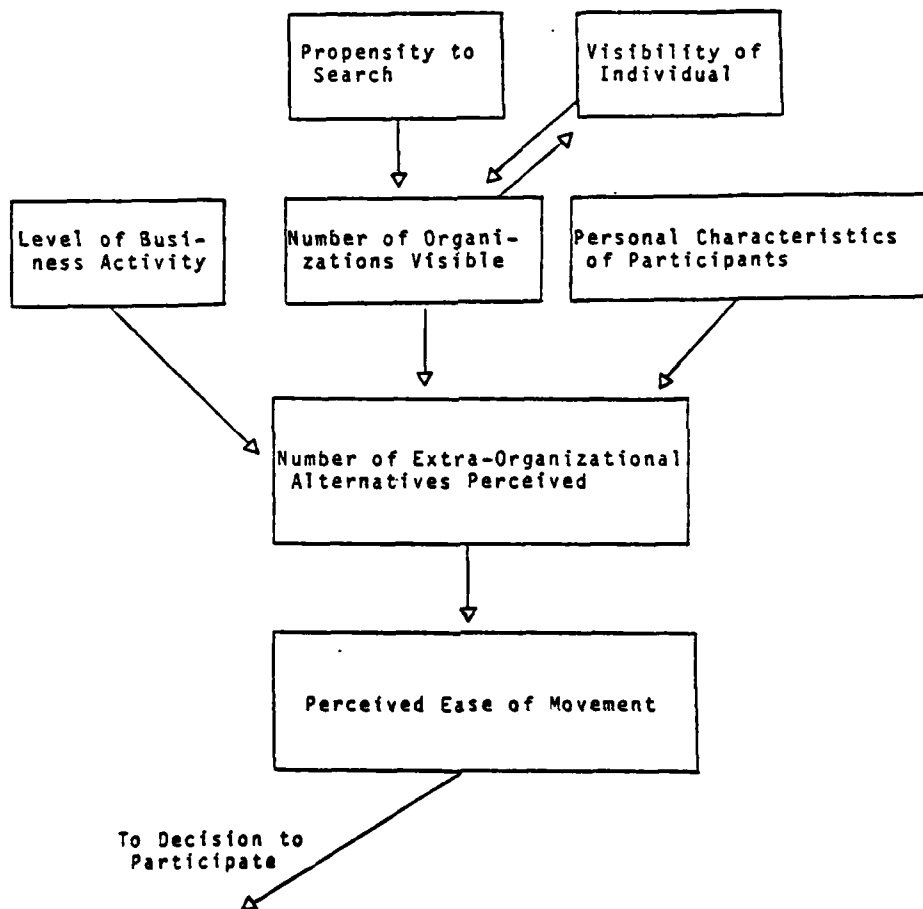


Figure 1b: Major Factors Affecting Perceived Ease of Movement [March and Simon, 1958]

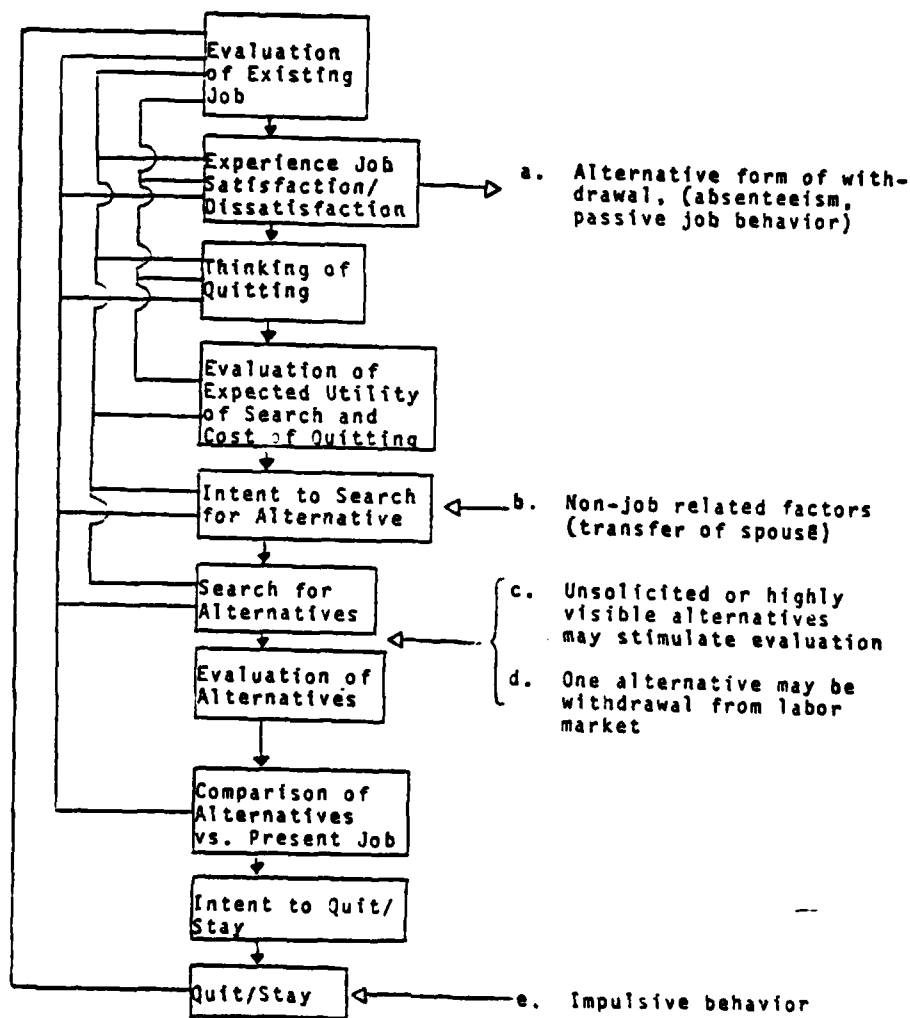


Figure 2a: Mobley's Turnover Decision Process Model
(Mobley, 1977)

steps between dissatisfaction and actual quitting. It also implies there are several important considerations, not directly in the model, which may elicit behavior at a particular step.

The following year, Mobley, Horner, and Hollingsworth (1978) proposed a simplified version of Mobley's heuristic model. The nature of this simplified model suggests that a variety of cognitive and behavioral phenomena are occurring between the emotional experience of job dissatisfaction and the withdrawal behavior (Mobley, et al., 1978). It is implied that job dissatisfaction stimulates thoughts of quitting leading to an evaluation of alternatives, intention to quit, and the withdrawal decision. The model is illustrated in Figure 2b.

The effectiveness of the simplified model was tested by Mobley, et al. (1978) in a field study conducted to predict turnover of hospital employees. Two additional variables, age and tenure, were included in the model for this study and were hypothesized as having an indirect affect on turnover through job satisfaction and the probability of finding an acceptable alternative. Survey data was collected from 203 full-time employees working in a southeastern urban hospital. Forty seven weeks later, the actual turnover data was obtained from hospital records and analyzed by regression analysis. The results revealed that intent to quit exhibited the only significant standardized regression coefficient with actual turnover, .58 at the .01 significance level. Intent to search

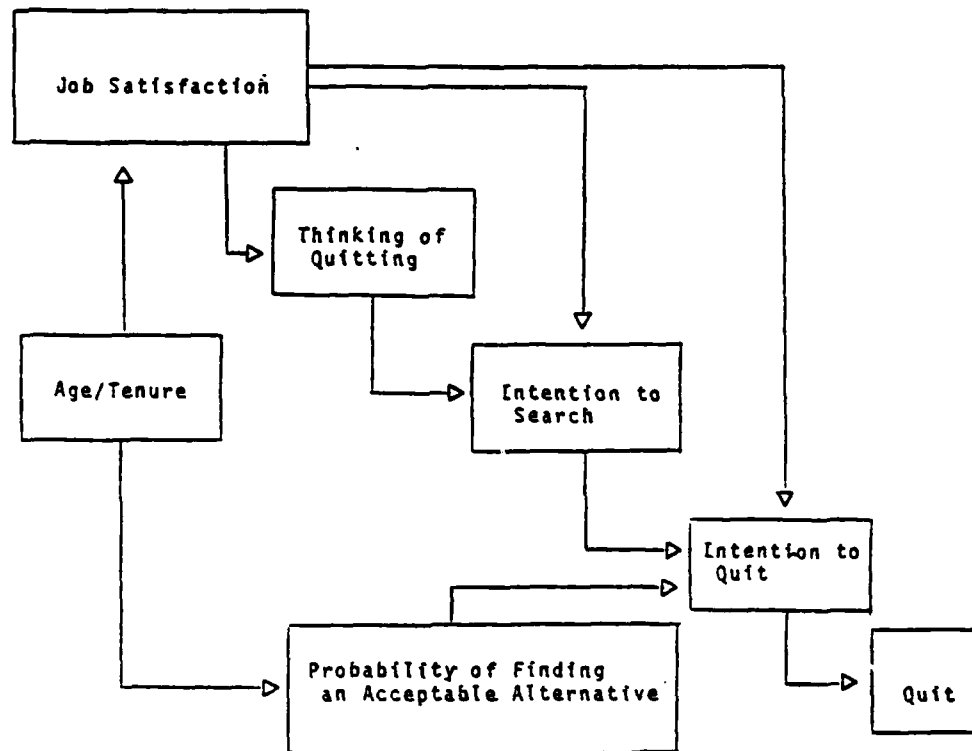


Figure 2b: The Mobley, Horner, and Hollingsworth (1978) Turnover Model

exhibited the strongest coefficient with intent to quit, .56 at the .01 significance level. The strongest standardized regression coefficient for intent to search was with thinking of quitting, .44 at the .01 significance level. Job satisfaction exhibited the highest standardized regression coefficient with thinking of quitting (-.54) and with intentions (.05) rather than with actual turnover (-.01). Finally, the probability of finding acceptable alternatives exhibited a weak but significant standardized coefficient (.13) with thinking of quitting, a relationship not previously predicted by the model.

The internal consistency of Mobley's simplified turnover model was tested by Miller, Katerberg, and Hulin (1979) using data from two independent military samples. The model was operationalized by collapsing the seven variables into four more general constructs: withdrawal behavior (turnover), withdrawal cognitions (intention to quit, intention to search, thinking of quitting), job satisfaction, and career mobility (age, tenure, probability of finding an acceptable alternative). The advantage of grouping the variables tended to make the results more consistent with the model's predictions, and to enhance the reliability of the hypothesized constructs (Miller, et al., 1979). Analysis of the data, using hierarchical regression procedures supported the four-construct model. Job satisfaction and career mobility influenced turnover only through withdrawal cognitions. Relations among the specific

measures were shown to fit moderately well with links hypothesized by Mobley et al. (1978). The overall results indicated the model had good predictive validity and a moderate internal consistency (Miller, et al., 1979).

Price's Model. Price (1977) conceptualizes the turnover process as an interrelationship of determinants, intervening variables, and correlates. He identifies nine determinants as follows: pay, integration, instrumental communications, formal communications, centralization, routinization, professionalism, upward mobility, and distributive justice. The two variables which intervene between the determinants and turnover are satisfaction and opportunity. The model is illustrated in Figure 3 along with the causal relationships. The model also shows that the two intervening variables occur at different times; satisfaction must precede opportunity. In addition to his nine determinants, Price identified nine correlates which affect the turnover decision and he classified them (based on the amount of supportive evidence present) as strong, medium, and weak. The nine correlates are categorized as follows:

STRONG	MEDIUM	WEAK
Length of Service	Level of Skill	Education
Age	Blue/White Collar	Manager/Non-
Level of Employment	Workers	Manager
	Country	Government/Non-
		Government

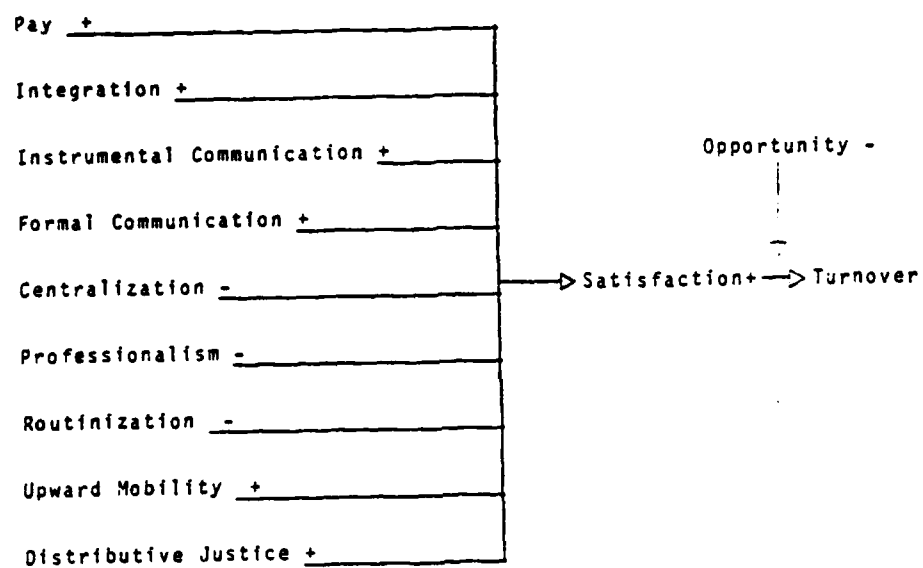


Figure 3: Price's (1977) Turnover Model

In a study conducted to investigate supervisory behavior and employee turnover, the following determinants of Price's model were used: pay, communications, and integration (Krackhardt, McKenna, Porter, and Steers, 1981). Pay is defined as the money, fringe benefits, and other commodities that have financial value which the organization gives to employees in return for their service (Price, 1977). Communication is the transmission of information to organizational members. Integration is the extent of participation and/or quasi-primary relationships among employees of the organization (Price, 1977). The objective of the study was to determine the extent to which these three variables could be manipulated by the supervisor to provide a change in turnover rates. It was found that supervisory interaction (manipulation) with an employee's pay, integration, and communication could produce changes in turnover rates (Krackhardt, et al., 1981). Supervisors who did not interact with the employees generally contributed to higher turnover rates.

In a study predicting voluntary and involuntary turnover using absenteeism and performance indices, Stumpf and Dawley (1981) found that education was not useful for predicting voluntary and involuntary turnover. The reader will recall that education was cited by Price to be a weak correlate. They concluded that more variables, both dependent

and independent, need to be added to conceptual models in order to predict voluntary and involuntary turnover.

Steer's Model. The concept of organizational commitment is defined as the relative strength of an individual's identification with, and involvement in, a particular organization. In recent years, research has shown this concept to be a better predictor of turnover than job satisfaction (Steers, 1977). Steers' organizational commitment model focuses on the antecedents and consequences of organization commitment in order to explain the behavioral outcomes of commitment. The model is composed of two parts: antecedents of commitment and outcomes of commitment.

The antecedents of commitment are influences that are found in the work environment. These can be grouped into three main categories: personal characteristics, job characteristics, and work experience (Steers, 1977). Personal characteristics consist of those variables which define the individual, such as age, education, and need for achievement. Job characteristics include such influences as job challenge, opportunities for social interaction, and the amount of feedback provided on the job. Work experiences that influence commitment include group attitudes toward the organization, organizational dependability and trust, perceptions of personal investment in and personal importance to an organization, and rewards or the realization of expectations.

In the second component of the model, outcomes of commitment, Steers hypothesizes that commitment leads to several specific behavioral outcomes. These outcomes are the desire and intent to remain with the organization, attendance, retention and job performance. Figure 4 illustrates Steers' organizational commitment model.

A cross validation study of the model was conducted by Steers (1977) using two diverse samples of employees in separate organizations. The first sample consisted of 382 hospital employees who held a variety of technical and non-technical jobs. The second sample consisted of 119 research scientists and engineers employed by a major research laboratory. In both samples, questionnaires were administered which measured the variables of personal characteristics, work experiences, organizational commitment, desire and intent to remain, and performance behavior.

Analysis of the data revealed that all three sets of antecedents were significantly related to commitment thus supporting the first part of the model. It was found that work experiences were more closely associated with commitment than personal or job characteristics for both samples. The second component of the model was only partially supported. Strong support was found for the proposition that commitment is associated with increases in an employee's desire and intent to remain. Commitment was also found to be significantly

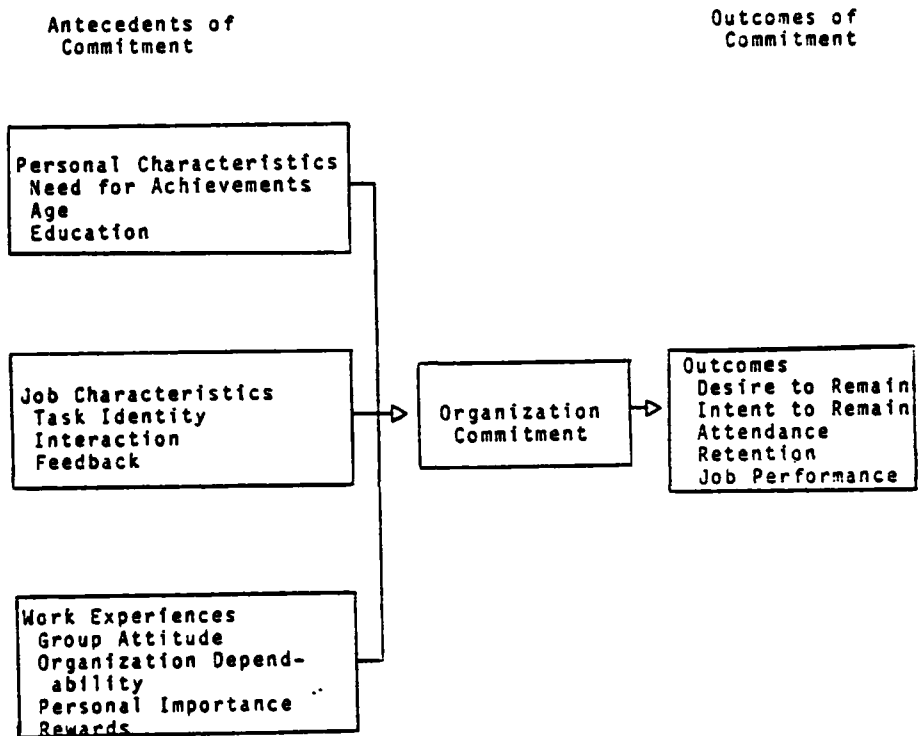


Figure 4: Steers' (1977) Organizational Commitment Model

and inversely related to employee turnover. Commitment was related to attendance for one sample but not the other, while no direct or consistent association was found between commitment and job performance for these samples. Commitment was influenced in both samples by the need for achievement, group attitudes toward the organization, education (inversely), organizational dependability, perceived personal importance to the organization and task identity (Steers, 1977).

Porter, Steers, Mowday, and Boulian (1974) tested the predictive ability of organizational commitment and job satisfaction in determining stayers and leavers in a sample of psychiatric technician trainees. Surveys were administered four times during the training period. Turnover occurred only after the training period concluded. The results demonstrated that organizational commitment predicted voluntary resignation more accurately than job satisfaction across several time periods.

A longitudinal study conducted by Porter, Crampon, and Smith (1976), investigated the relationship between organizational commitment and turnover in managerial trainees at Sears Roebuck Company. The results indicated that those trainees who voluntarily left the organization during the initial fifteen month employment period had begun to show a definite decline in their commitment to the organization prior to actually leaving (Porter, et al., 1976). Organizational

commitment appeared to be directly related to turnover.

Spencer and Steers (1980) examined the influence of personal factors and perceived work experience on employee turnover and absenteeism. They found personal characteristics to be better predictors of absence behavior than were work experiences. With respect to work experiences, only perceived organizational dependability was significantly related to turnover but not absenteeism.

Martin's Model. Martin's contextual model of intent to leave is an integrated and expanded model for investigating employee intentions to stay or leave an organization (Martin, 1979). Martin integrated research efforts that have focused on determining the causes of employee intention to stay with those efforts which have focused on determining the causes of employee intention to leave. The model derived contains ten determinants, two intervening variables, six demographic variables and intent to leave as the dependent variable. The determinants are as follows: (1) pay, (2) integration, (3) instrumental communications (performance feedback), (4) formal communications, (5) centralization of decision-making authority, (6) routinization, (7) distributive justice, (8) upward mobility, (9) community participation, and (10) work commitment.

The first eight determinants presumably reflect the social-psychological-motivational process by producing an

indirect impact on intent by first acting on job satisfaction (Martin, 1979). Community participation and work commitment have a direct motivational impact on intent. The two intervening variables between the first eight determinants and intent to leave, are job satisfaction and opportunity. The six demographic variables included in the model are: length of service, age, education, occupation, marital status, and sex. It is asserted by the model that these variables will have motivational consequences for job satisfaction as well as intent (Martin, 1979). The model is illustrated in Figure 5 along with the causal relationships.

The predictive ability of Martin's model was tested at a medium size, midwestern service organization that markets educational programs and services. Data collected from 177 full-time employees was analyzed by multiple regression and path analysis. The results revealed that four structural/process variables (upward mobility, distributive justice, instrumental communications, and routinization), one environmental variable (opportunity), one mediative variable (job satisfaction), and four demographic variables (occupation, age, education, and sex) were statistically significant in affecting the employees intent to leave decisions (Martin, 1979). Of these ten significant variables, only the occupation proposition did not follow the posited causal direction shown in the model. Opportunity produced a direct effect on job

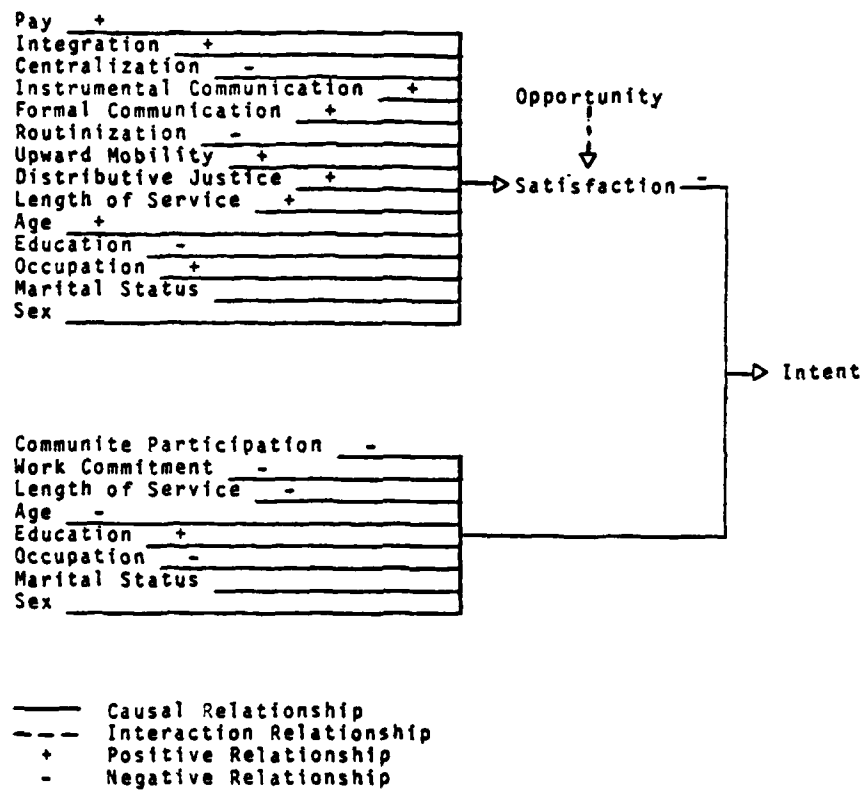


Figure 5: Martin's Model of Intent to Leave (Martin, 1979)

satisfaction rather than the posited interactive effect with job satisfaction. The overall predictive power of the model, although rather low ($R^2=.16$), seems to compare favorably with other "intention research" reviewed by Martin.

Summary. Current literature shows that conceptual models are making important contributions to the understanding of employee turnover. They move beyond the satisfaction-turnover relationship and attempt to describe turnover as an interrelated process. The March and Simon model plays an instrumental role in the development of many of the current turnover models. The predictive capabilities of these models show that the Mobley (1978) model predicted intentions and actual behavior with a relatively higher degree of accuracy. The organizational commitment model consistently predicted turnover better than did job satisfaction. Intent to remain was used in all the models, although Mobley (1977, 1978) used it as an independent variable and others used it as a criterion variable (Martin, 1979; Young, 1980). All of the models discussed illustrate the many important facets considered by various researchers in describing the turnover process.

Relevant DOD Reports and Research

In an attempt to make "a good service better," the Air Force has conducted a series of surveys to measure the attitudes of AF personnel toward a wide variety of personnel-program related issues (McNichols, Manley, and Stahl, 1980).

These Quality of Air Force Life surveys ("HQ USAF," 1975, 1977, 1980) that were administered to AF personnel in 1975, 1977, and 1980 were based on a model developed by the Air Force Management Improvement Group (AFMIG). The model, comprised of nine factors, is illustrated in Figure 6. Results observed across the three survey administrations show a progressively increasing dissatisfaction with the economic aspects of military life as well as small positive shifts in satisfaction with some of the non-economic factors such as work, leadership, supervision, equity, and personal growth (McNichols, et al., 1980). Also evident was a pronounced downward trend of intent to pursue an AF career. The major reason given for this negative career intent decision was dissatisfaction with pay and allowances. Overall, the measure of job satisfaction showed a slight increase during the 1975-1980 period for both officers and enlisted personnel (McNichols, et al., 1980).

An Airman Exit Survey conducted by AF MPC obtained data from 1052 airmen leaving the AF between January and March 1981. The dominant issue that affected the decision to exit the AF was pay. It was perceived that civilian jobs offered higher pay, that the actual amount of AF pay was too small, and that annual pay increases were too small ("AF Military Personnel Center," 1981). Statistics on the characteristics of the exiting airmen show that 85 percent were males, 93 percent were in the grades of E-4 to E-5, 43 percent

ECONOMIC STANDARD: Satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

ECONOMIC SECURITY: Guaranteed employment; retirement benefits; insurance; protection for self and family.

FREE TIME: Amount, use, and scheduling of free time alone or in voluntary associations with others; variety of activities engaged in.

WORK: Doing work that is personally meaningful and important; pride in your work; job satisfaction; recognition for my efforts and my accomplishments on the job.

LEADERSHIP/SUPERVISION: Has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

EQUITY: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

PERSONAL GROWTH: To be able to develop individual capacities; education/training; making full use of my abilities; the chance to further my potential.

PERSONAL STANDING: To be treated with respect; prestige; dignity; reputation; status.

HEALTH: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care services provided.

Figure 6: Factors of the Quality of Air Force Life Model
(McNichols, et al., 1980)

had never been married, 79 percent held second jobs, and 64 percent of those married had working spouses ("AF Military Personnel Center," 1981). The career intention section of the exit survey indicated 43 percent of the exiting airmen wanted to make the AF a career when they first entered, 30 percent were undecided, and 27 percent were definitely against an AF career. The predominant reasons given for entering the AF were the educational benefits and skills training. Responses concerning the comparison of AF and civilian jobs indicated that a majority of the exiting airmen believed that they would have more say about what happens to them in civilian jobs, and that the working conditions and supervision would be better. The factors deemed most important (based on the data) in keeping the airmen in the AF were increased pay, supervisor sensitivity, and improved promotion opportunity ("AF Military Personnel Center," 1981).

A 1970 study conducted by the AF Human Resources Laboratory (HRL), Lackland AFB Texas, identified several factors relating to the retention of military scientists and engineers (S&E) in the Air Force. The results seem to suggest that AF career oriented S&E officers may have a different need structure than their non-AF career oriented counterparts. The need for managing and applied research characterized the career oriented scientist, while the need for pure research and scientific achievement characterized the non-career oriented scientist ("Personnel Research Division," 1970]. A

decision to stay or to leave the Air Force is a career decision which may be related to active duty experiences. Career oriented S&E officers may start out career oriented and then experience job assignments which simply sustain that orientation ("Personnel Research Division," 1970). Likewise the non-career oriented S&E officer may simply perceive active duty experiences as supporting their initial attitudes regarding a military career. Therefore, this leaves only the initially undecided group to be significantly influenced by their type of active duty experiences.

In a study focusing on factors that influence the retention of AF pilots in the six to eleven year group, Gulich and Laakman (1980) found the most significant determinant of turnover to be assignment policies. It was concluded that a positive change in the assignment policy (one which allows a member more input into and stability in his assignment) might have influenced between 12 and 19 percent of the 94 pilots who left the military, to remain on active duty (Gulich and Laakman, 1980).

Summary. Studies conducted within the DOD have shown that AF personnel leave the military for many reasons. The Quality of Air Force Life survey results indicate increasing dissatisfaction with the economic situation of the AF, although small positive shifts were evident in several non-economic areas. A survey conducted by AF MPC of 1052 airmen leaving

the Air Force indicated the most important factors influencing their career decisions were pay, supervision, and the promotion system. An AF HRL study concluded that a career oriented S&E officer is characterized by the need for managing and applied research and the decision to stay or to leave the AF is related to active duty experiences. Finally, a retention study of AF pilots in the six to eleven year group found that the most significant determinant of turnover within the group was assignment policy.

Based on the literature review presented in this chapter, the following hypotheses are deemed appropriate for this study.

Hypotheses to be Tested

1. The factors that have influenced the career decision of each personnel category under investigation in 1977 are the same in 1980.
2. The relative importance of the factors influencing the career decision of each personnel category under investigation in 1977 is the same in 1980.¹
3. The relative importance of the factors that have influenced the career decision of each personnel category under investigation do not differ between categories.
4. Demographic variables, specifically grade, years service, marital status, sex, race, and educational level, are important influences on the career decision.

¹Relative importance is defined as the rank order of the variables based on the magnitude of the F value.

CHAPTER III

METHODOLOGY

Introduction

This chapter provides detailed descriptions of the procedures and techniques employed to test the hypotheses and to accomplish the research objectives presented in Chapter I. The chapter is composed of five major sections. The first provides general information about the Quality of Air Force Life (QOAFLL) survey including a brief review of its development. Section two addresses the data base by considering the changes that have occurred in the basic survey since its conception, and a weighting procedure designed to compensate for survey bias. Section three develops the process of selecting the subgroups of Air Force personnel upon which this study focuses, followed by a discussion of the selection process for the independent variables utilized in the model building. The fourth section identifies and delineates the independent variables. The final section presents the statistical procedures, model selection criteria, and analytical techniques utilized throughout the study.

The Quality of Air Force Life Survey

Development. As mentioned in Chapter I, with the

inception of the All Volunteer Force (AVF) came the realization that major emphasis was needed in the areas of manpower and personnel. For the Air Force, one related effort originated in early 1975 when the then USAF Chief of Staff, General David Jones, established the Air Force Management Improvement Group (AFMIG). The charter given this group was to closely examine Air Force "people" programs with the intent of making a good service better. Such an objective necessitated the collection of data describing the attitudes of Air Force personnel toward various Air Force programs and issues. To satisfy this requirement, a series of survey efforts were initiated.

Since the surveys had to capture many attitudes and perceptions concerning a diverse set of issues, preliminary efforts centered around the development of a theoretically based quality of worklife model which would provide a logical structure for subsequent survey evolution. The Quality of Air Force Life (QOAFLE) model resulted from these early efforts and was adapted as a general framework for survey development. The nine factors incorporated within the QOAFLE model are presented in Chapter II (see Figure 6) (McNichols, Manley, and Stahl, 1980).

Questions and Response Sets. As the survey evolved, questions designed to measure attitudes associated with each of the nine factors in the QOAFLE model were incorporated.

Table 1 specifies the number of different questions included in the 1977 and 1980 surveys for each of the factors. Complete copies of both surveys are included in Appendix A.

From the beginning, AFMIG incorporated questions that were currently in use in the field (e.g., the Hoppock Job Satisfaction series) or developed their own under the auspices of AFMIG members trained in survey development. All questions on the survey were divided into two categories: attitudinal and demographic measurements.

Each attitudinal question has a response set built around a Likert Scale. The possible different answers for each question vary from a high of 11 (A through K), as in question 61 (1980 survey), to a low of four (A through D), as in question 26 (1980 survey).

Pilot Testing, Reliability, and Validity. With the compilation of the initial survey in 1975, a very limited pilot testing was conducted. The main constraint that prevented more extensive testing was the time limitation forced on AFMIG. After the survey was updated for errors discovered in the pilot testing, it was administered on a full scale basis.

AFMIG was disbanded late in 1975 and many of its activities were incorporated within other Air Force agencies (McNichols, et al., 1980). Subsequently, the survey was never subjected to a formal check for validity or reliability.

TABLE 1

The Number of Questions Associated With the
Factors of the 1977 and 1980 QOAFL Surveys

Factor	1977	1980
Economic Standard	2	9
Economic Security	29	7
Free Time	4	1
Work	32	52
Leadership/Supervision	49	10
Equity	7	5
Personal Growth	9	1
Personal Standing	7	4
Health	7	13

Note: In 1977, the remaining 19 questions were demographics. In 1980, categories of questions not related to the QOAFL model were included, as well as 19 questions on demographics. The extra-model questions were not relevant to this study.

Survey Administration. In 1975, the initial QOAFL survey was administered to a total of 38,858 people of which 11,111 were active duty Air Force personnel. The remaining 27,747 included Air Force civilian employees and spouses of Air Force military personnel. Subsequently, with support from the Air Force Institute of Technology, surveys were administered in 1976, 1977, and 1980. The 1976 effort involved only Air Force commanders. The 1977 and 1980 surveys were administered across the entire spectrum of active duty personnel in the grades of Airman Basic (E1) through Colonel (O6).

For each administration of the survey, participants were selected randomly from the records of the Air Force Manpower and Personnel Center (AFMPC) at Randolph AFB, Texas (McNichols, 1982). Survey materials were distributed at each participating Air Force installation by the local CBPO Survey Control Officer/NCO. Completion of the survey was strictly voluntary and the anonymity of each respondent was guaranteed (Young, 1980).

The Data Base

Differences Between the Surveys. Subsequent to its inception in 1975, changes have been made to the survey, but the general structure built around the nine factors of the QOAFL model remains intact. Some of the changes reflected the inputs of various Air Force agencies which were interested

in attitudes with regard to various Air Force programs or issues. For instance, the 1977 survey included a greater number of questions designed to measure retention related factors than had previous versions, thus reflecting the increased interest in personnel retention data by Air Force agencies. The 1980 survey included even more questions incident to retention issues (McNichols, et al., 1980).

The research findings presented in this study are based on QOAFI survey data collected in 1977 and 1980. As previously mentioned, different versions of the survey were administered in 1975 and 1976. It was felt that the data collected in 1975 had become obsolete due to the following factors: inflation, pay raise "caps" instituted by different Presidential administrations and Congresses, various subsequent pay raises, recruiting policies, and others. Therefore, the data from the 1975 survey was considered inappropriate for this study. The 1976 data was deemed unusable since it involved only Air Force commanders. This is a very specialized group, composed mostly of senior officers whose career intent is already known.

Both the 1977 and 1980 survey populations consisted of personnel from the grades E1 through O6. Confining this study to these two years insured a more uniform sampling of responses based on the respondents' grades.

The 1977 survey contained 165 questions of which 19 measured demographic data and the remainder measured attitudes

and opinions. A total of 10,687 surveys were completed and returned [Tomlin, 1980].

The 1980 survey contained 144 questions; 19 measured demographics while the remainder measured attitudes and opinions. In 1980, 5,425 completed surveys were returned.

Data Selection. The data for this study consisted of the responses to certain questions from the 1977 and 1980 versions of the QOAFI surveys. Due to the comparative nature of this work, only those questions that possessed identical stems and response sets for both surveys were considered. Table 2 indicates the various questions utilized in this study by survey year, question number, and the general topic. It should be noted that, unless specifically mentioned otherwise, question numbers referenced in the text (i.e., Q6, Q10, etc.) pertain to those numbers listed under the heading "study" in Table 2. Even though a particular question number may have changed between the two surveys, the stem and response sets of the questions listed in Table 2 were identical.

Weighting Procedure. A weight-compensating procedure was employed to correct the bias introduced by oversampling some groups in 1977 and 1980. This oversampling resulted largely as a function of the grades of those individuals completing and returning the surveys. Application of the various weights, one for each grade, compensated for any differences

TABLE 2
Questions Utilized in this Study

General Topic	Study	1977	1980
<u>Demographic Variables</u>			
Education Level	6	6	6
Marital Status	7	7	7
Race	8	12	9
Sex	9	13	10
<u>Dependent Variable</u>			
Career Intent	10	14	11
<u>Attitudinal Variables</u>			
Economic Standard	15	21	20
Economic Standard	19	26	32
Free Time Satisfaction	21	52	36
Hoppock Q1	23	57	44
Hoppock Q2	24	58	45
Hoppock Q3	25	59	46
Hoppock Q4	26	60	47
Institutionalism	30	90	92
Job Autonomy	32	131	95
Job Autonomy	33	132	96
Job Autonomy	34	133	97
Job Autonomy	35	135	98
Health Care Satisfaction	42	160	109
Economic Standard	45	29	33
Economic Standard	46	30	34
Institutionalism	48	74	51
Institutionalism	55	139	101
Health Care Satisfaction	58	161	110
Health Care Satisfaction	55	162	111

that existed between the ratios of the grades comprising the sample with the same respective grades within the population, i.e. the entire Air Force.

Each grade was assigned a specific numerical weight. Each particular weight was calculated by dividing the total number of personnel in a particular grade (in the Air Force) by the total number in the same grade that completed a survey. The resultant value or weight was applied by incorporating the SPSS procedure WEIGHT [Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975]. A listing of the weights applied for each is provided in Appendix B.

Personnel Categories, Independent Variable Selection and the Criterion

Personnel Categories. The various groups investigated in this study are comprised of Air Force personnel in the officer and enlisted career fields. The selection of the officer and enlisted categories was based primarily on shortages in the present force structure. The identification of ranks was based on current and forecast shortages as portrayed in AFMPC briefings. The greatest number of shortages seem to appear in the middle management arena which is comprised of those positions staffed by Captains and Majors (officers), and Staff and Technical Sergeants (enlisted). The authors decided to study the personnel in these ranks as well as Second and First Lieutenants, and Airman Basic through Senior

TABLE 3
Ranks of Officer and Enlisted Personnel

<u>Officers</u>	<u>Enlisted</u>
Second Lieutenant (O1]	Airman Basic (E1]
First Lieutenant (O2]	Airman (E2]
Captain (O3]	Airman First Class (E3]
Major (O4]	Senior Airman/Sergeant (E4]
	Staff Sergeant (E5]
	Technical Sergeant (E6]

Airman/Sergeant, as each junior officer or enlisted member potentially represents a future middle manager. Therefore, the factors that predict the career intent of future middle managers should be of great value. Table 3 identifies all the ranks investigated in this study.

The more senior ranks were eliminated from this work due to two factors. First, the level of manning for Lieutenant Colonels and Colonels (officers), and Master Sergeants, Senior Master Sergeants, and Chief Master Sergeants (enlisted) is not as critical as for the middle ranks. Secondly, due to the promotion and rank structure in the Air Force, the people that possess these higher ranks are past or very close

to the 20 year point in their careers and, therefore eligible for retirement. Their career intent is assumed to be very high (McNichols, 1982).

Table 4 lists all the personnel categories employed in this study including job titles or descriptions and the first three digits of the associated Air Force Specialty Codes (AFSC). The identification of shortages was based on information gleaned from conversations with AFMPC and Air Staff personnel, unclassified manpower reports, and trade publications such as the Air Force Magazine and the Air Force Times. In addition, enlisted shortages were also identified from an AFMPC document, the Chronic Critical Shortage (CCS) list. The CCS specifies the 65 enlisted skill areas experiencing the greatest manpower discrepancies.

According to this list (Newman, 1981) the Air Force is facing a shortfall of approximately 11,300 enlisted personnel, of which over 80 percent (9,300) are within the aircraft maintenance career fields. Therefore this study focuses on those enlisted job categories identified as aircraft maintenance related. The specific aircraft maintenance career fields were chosen by examining the FY 82 CCS retention statistics and identifying those with the lowest retention rates that were also represented in the 1977-1980 QOAFI survey data base.

TABLE 4

Breakdown of the Personnel Categories
by the First Three Digits of the
Air Force Specialty Code (AFSC)

AFSC	Category	Air Force Specialty Title
Navigator		
152		NAV Bombardier
153		Navigator (General)
154		Navigator (Airlift)
156		Navigator (Recon/ABN, C ²)
157		Electronic Warfare Officer
158		Navigator, Special Ops
221		Air Ops Staff Officer, Navigator
222		Air Ops Officer, Strategic
223		Air Ops Officer, General
224		Air Ops Officer, Airlift
225		Air Ops Officer, Weapon Systems
226		Air Ops Officer, Recon
227		Air Ops Officer, EW
228		Air Ops Officer, Special Ops
229		Air Ops Officer, General Air Ops
Pilot		
102		Helicopter Pilot
103		Search-Rescue Pilot

TABLE 4 - continued

AFSC	Category	Air Force Specialty Title
Pilot		
104		Transport Pilot
105		Tactical Airlift Pilot
106		Tanker Pilot
111		Fighter Pilot
113		Special Tactics Fighter Pilot
114		Forward Air Controller
123		Strategic Bomber Pilot
132		Recon/EW/ABN/C ² Pilot
135		Instructor Pilot
141		Air Ops Staff Officer Pilot
142		Air Ops Officer, Airlift
143		Air Ops Officer, Strategic
144		Air Ops Officer, Special Ops
145		Air Ops Officer, Tactical
147		Air Ops Officer, Recon/EW/ABN/C ²
148		Air Ops Officer, Helicopter/S-R
149		Air Ops Officer, General Air Ops
Scientific and Engineering		
263		Physicist
264		Chemical Research Officer

TABLE 4 - continued

AFSC	Category	Air Force Specialty Title
Scientific and Engineering		
265		Metallurgist
266		Nuclear Research Officer
268		Scientific Analyst
281		Staff Developmental Engineer
282		Electronic Engineer
283		Mechanical Engineer
284		Astronautical Engineer
285		Aeronautical Engineer
286		Experimental Test Pilot
287		Experimental Test Navigator
289		Project Engineer
305		Comm-Electronics Engineer
552		Civil Engineer
Enlisted		
328		Avionics Systems Maintenance Technician
423		Aircraft Systems Maintenance Technician
426		Aircraft Systems Maintenance Technician
431		Aircraft Maintenance Technician
462		Aircraft Armament Systems Maintenance Technician

Independent Variable Selection Process. The independent variables used to investigate the career intent of each officer and enlisted category were derived by a review of the literature to identify those factors that have been found to affect career intent which were also represented in the QOAF data base. These variables are represented by individual questions (demographic measures) or composites (attitudinal and interactive measures). To help identify the underlying dimensions measured by the attitudinal composites, the SPSS procedure, FACTOR (Nie, et al., 1975) was employed. Factor analysis, resulting from the aforementioned procedure, is useful for examining the underlying structure of a set of variables. The objective is an analysis of the interdependencies or structure of the variables (Harman, 1967). The data for each year was factor analyzed separately.

The factor analysis identified six underlying dimensions measured by the questions utilized in this study. The factors identified, which were identical for both years, were: Job Satisfaction, Job Autonomy, Health Care Satisfaction, Institutionalism, Economic Standard Satisfaction, and Free Time Satisfaction. Table 5 delineates the six factors along with their factor loadings.

The reliability coefficients for each factor, also included in Table 5, were determined by utilizing the SPSS procedure, RELIABILITY using Cronbach's alpha (Nie, et al., 1975).

TABLE 5
Factor Identification, Factor Loadings,
and Coefficients of Reliability

Factor Name	Reliability Coefficient	Variable	Loading
Job Satisfaction(QA)	.9113	Q24	.87039
		Q26	.83163
		Q23	.81925
		Q25	.77463
Health Care Satisfaction(QC)	.9699	Q59	.86390
		Q58	.82470
		Q42	.75394
Economic Standard Satisfaction(QE)	.8397	Q45	.78368
		Q46	.72883
		Q45	.59295
Job Autonomy(QB)	.9846	Q33	.88198
		Q34	.84667
		Q32	.77220
		Q35	.37875
Institutionalism(QD)	.8277	Q55	.72122
		Q30	.67345
		Q48	.59528
Free Time Satisfaction(QF)	.8156	Q19	.86229
		Q21	.29343

Criterion. For all the models derived from the QOAFI data used in this study, the dependent variable was a survey respondent's stated career intent (Q10). In this case, career intent refers to the individual's intention, at the time he/she completed the survey, to either remain in or leave the Air Force.

Independent Variables

Four of the six factors identified (Job Satisfaction, Health Care Satisfaction, Economic Standard Satisfaction, and Free Time Satisfaction) were taken from the QOAFI model developed by AFMIG (see Figure 6 in Chapter II). The remaining two factors, Job Autonomy and Institutionalism were based upon the authors' interpretation of the questions comprising these factors.

Job Satisfaction (QA). Job Satisfaction is defined as the degree to which a member of an organization has a positive affective orientation toward membership in the organization (Price, 1977). As operationalized in this study, Job Satisfaction is the Air Force member's perception of the satisfaction with his/her Air Force job as measured by the four Hoppock questions (Q23, Q24, Q25, Q26).

The four Hoppock questions relate to an individual's perception of satisfaction with various aspects of his/her job. The authors postulate that high Job Satisfaction contributes positively to career intent.

McNichols, Stahl, and Manely (1978) established the validity and reliability of the Hoppock measure in a study involving in excess of 29,000 participants. Convergent validity was examined by comparing it with the Job Descriptive Index (JDI). The same sample expressed their job satisfaction using both the JDI and the Hoppock measure. They found a significantly strong association ($r = .73$, $\alpha = .01$, one tailed).

In the same study, the concurrent validity was established by comparing the correlation between the Hoppock measure and stated career intent ($r = .40$), with the JDI and stated career intent ($r = .36$). The authors (McNichols, et al., 1978) concluded that this was a highly satisfactory correlation.

For the four samples studied, the reliability estimates ranged from .758 to .890 (McNichols, et al., 1980). The reliability coefficient for the Hoppock measure as used in the current study was .9113.

Health Care Satisfaction (QC). As operationalized for this study, Health Care Satisfaction refers to the perception of the physical and mental well being of the Air Force member and dependents based on the health care services provided by the Air Force. It encompasses the detection, diagnosis, treatment, and cure of ailments, as well as the quality and quantity of available services. It is postulated

that Health Care Satisfaction correlates positively with career intent. This composite variable was composed of three questions: Q42, Q58, and Q59.

Economic Standard Satisfaction (QE). As used in this study, the variable refers to the degree of satisfaction with the level of pay and benefits provided by the Air Force. Also included is the member's satisfaction with his/her perceived ability to maintain an acceptable standard of living. The authors postulate that high Economic Standard Satisfaction contributes to high career intent. This composite variable included Q15, Q45, and Q46.

Free Time Satisfaction (QF). As the name suggests, this variable refers to an Air Force member's satisfaction with his/her extra-job time (i.e., free time). Included are such considerations as the amount, quality, and scheduling of the free time. The authors postulate that the correlation between Free Time Satisfaction and career intent is positive. The composite variable was composed of two questions, Q19 and Q21.

Job Autonomy (QB). Job Autonomy is defined as the degree to which the individual is allowed the freedom and discretion to schedule his/her work related activities and to determine the procedures necessary to carry out these activities (Albenese, 1981). More specifically, Job Autonomy relates to the degree of interaction between the Air Force

member and his/her supervisor in areas concerning setting of performance goals, feedback, recognition, and supervisor influence on the organization. The authors postulate that perceived Job Autonomy relates positively to career intent. This composite variable included Q32, Q33, Q34, and Q35.

Institutionalism (QD). As operationalized in this study, Institutionalism refers to the traditions, culture, and policies that comprise the "Air Force way of life". Tomlin (1980) contends that the commitment made by the individual to serve in the military, and the control over the individual is more than the normal employer-employee relationship. As a result, an Air Force career is not just another job, it is a way of life that calls for a special kind of motivation. The authors contend that the prime factors associated with this special motivation include a member's perception of the quality of Air Force leaders, satisfaction with Air Force promotion systems, and the required activities (both on the job and off) associated with being an Air Force member. These last three considerations comprise the specifics, as far as this study is concerned, of the Institutionalism variable. This composite variable consisted of three questions: Q30, Q48, and Q55. The authors postulate a positive relationship between Institutionalism and career intent.

Demographics. Hypothesis number four, presented in Chapter II, addresses the question of whether or not demographic

variables significantly predict career intent. Toward this end, four demographic independent variables were included in the model building process. As was seen in the literature reviewed in Chapter II, demographics have been shown to significantly predict turnover/career intent.

While each survey (1977 and 1980) contained 19 demographic questions, many were unsuitable for incorporation into this study. Many were eliminated for having different stems and/or response sets in one of the surveys, McNichols (1982) contends that two of the variables, Q3 (rank) and Q5 (time-in-service) should be eliminated since their value in predicting career intent is already known, i.e., they are the most significant predictors.

To verify McNichol's contention, the authors included Q5 (time-in-service) in a preliminary regression analysis for each category. Q3 (rank) was not included since it was highly correlated with Q5 ($r = .54$) and its inclusion would have provided essentially the same information. The results of the regression runs indicated that Q5 was the most significant predictor in all 16 models. Therefore, the authors decided to eliminate it from the study in favor of concentrating on the identification of the other predictors of career intent.

Ultimately, four demographic questions were included. Q6, the question dealing with education level, was included because it was felt that this represented one area where

present and future Air Force programs could significantly influence retention. Providing opportunities or incentives for furtherance of a member's education might help increase retention rates.

The questions concerning marital status (Q7), race (Q8), and sex (Q9) were included due to the continued high levels of emphasis these subjects receive as reflected in numerous conversations with Air Force members, and in trade publications such as the Air Force Magazine and the Air Force Times.

Interactive Terms. Two-way interaction terms were included in the model building process. Each interaction term combined the responses of two different independent variables, e.g., job satisfaction and job autonomy. The authors felt it important to include interaction terms in a further effort to explore what factors predict career intent. Also, since the presence of an interaction term in a model implies that the effect of a one-unit change in one independent variable, inclusion of these higher order terms was deemed appropriate. Appendix C details all the interactive variables employed in this study.

Data Analysis

Regression Analysis. Stepwise regression, with backward elimination (Nie, et al., 1975), was the specific analytical approach utilized in this study to ascertain the

mathematical relationship(s) between the criterion and the independent variables. This form of analysis involves a step-by-step process. It begins by including all specified variables in the first step of a regression run, and then removes the least significant independent variable on each subsequent step until there is just one variable remaining.

The result of each regression run is a series of mathematical equations referred to as models. Since a regression run was completed for each year and for each personnel category (i.e., one run was accomplished for pilots using the 1977 data and another run performed independently for the 1980 data), these equations represent predictive models of the career intent of specific subgroups of Air Force personnel for 1977 and for 1980.

Determination of the Best Model. Each time the data for a particular personnel category was regressed, a series of different models were generated. The differences between any two models in the regression process were the number of variables (one is removed at each step of the process), and a corresponding change in the pertinent statistics (e.g., F value, level of significance, and R^2).

Five criteria were established for identifying the "best model". These criteria are:

1. Level of significance. The minimum acceptable level of significance for all independent variables and the

overall model was set at .001 (.1 percent). Models not meeting this criteria were rejected.

2. F value for the model. With the other criteria satisfied, it was determined that the model with the largest F value would be deemed the best model.

3. R^2 or adjusted R^2 . With the other criteria satisfied, the best model was the one with the largest R^2 or adjusted R^2 values. The determination of which value to use (R^2 or adjusted R^2) was based on the respective sample size. If the sample size was small ($n < 100$), the adjusted R^2 value was used since it represents a more conservative estimate and serves to minimize the influence of sample fluctuation common with small samples. For large samples ($n > 100$) the R^2 value was considered.

4. Number of variables in the model. With the preceding three criteria satisfied, the best model was the one with the fewest variables since simplicity is a desirable goal in any model.

5. Reasonableness of the variables. This criteria gave flexibility to the selection process. Once a potential "best model" was identified, the independent variables removed in the preceding steps of the regression process were closely scrutinized. If any variable(s) seemed particularly important or significant, it was considered for inclusion into the model regardless of the R^2 or adjusted R^2 value.

Once a model met all five criteria, it was designated as the "best model" for that specific category of personnel and that particular year. It should be noted that any one of the five criteria could have served as a tie-breaker in deciding which model was "best", due to the subjective nature of the selection process. For instance, if two models for the same personnel category and the same year met all five criteria, the one with the least number of independent variables was selected.

Special consideration was given to the enlisted categories due to the exclusion of the top three enlisted ranks (see Table 3). The elimination of these ranks resulted in the reduction of the sample sizes of the five categories investigated. As previously mentioned, models derived from the regression of data from small samples may reflect an inflated R^2 value (due to sample fluctuations). One method for minimizing this problem is to consider the adjusted R^2 value. Due to two particularly small samples, 1980 Avionics Systems Maintenance ($n = 47$) and 1980 Aircraft Armament Systems ($n = 34$), the authors elected to conduct the regression analysis for the enlisted ranks twice. The first run included all the enlisted ranks, thus insuring the largest sample sizes, resulting in the best estimates of the R^2 values. The second run was designed to include only the target population (Airman Basic through Technical Sergeant). The optimum models

for each of the two runs were selected based on the five criteria mentioned earlier. The run involving all the ranks (full) was viewed as a standard by which the run involving only the target population (reduced) could be compared. If no major differences were identified between the R^2 /adjusted R^2 values for the respective categories within each run, it was assumed that the R^2 /adjusted R^2 values for the target population were valid. Table 6 depicts the R^2 /adjusted R^2 for both runs and the associated sample sizes. The results illustrate plainly that the observed differences between runs were negligible. The one exception (1980 Aircraft Armament Systems) was a result of the change in the number of variables in the derived models (the full model contained seven variables, while the reduced model contained only five).

Model Differences. Following the model building process, one question that remained (hypothesis 1) was whether or not there was a difference between the 1977 and 1980 models for each personnel category. For instance, if Job Satisfaction was a statistically significant predictor of career intent for Pilots in 1977, was it also significant in 1980? An answer in either direction could be very important, as it might signal a shift or trend in attitudes wrought by the influence of Air Force programs. It might also indicate the need for new programs to countermand an undesirable trend.

TABLE 6
R²/Adjusted R² Values of the Models Derived from the
Two Regression Runs Involving the Enlisted Ranks

Personnel Category	AFSC	1977			1980		
		Full ¹	n	Reduced ²	Full ¹	n	Reduced ²
Avionics Systems Maintenance	328	.4529	114	.4484	.4528	87	.4682
Aircraft Systems Maintenance	423	.3872	135	.3757	.4547	82	.4526
Aircraft Systems Maintenance	426	.2517	119	.2867	.4875	74	.4872
Aircraft Maintenance	431	.3471	420	.3514	.3431	218	.3314
Aircraft Armament Systems	462	.3508	99	.3629	.5112 ³	68	.3551 ⁴

Note: For samples of less than 100 (n < 100) the adjusted R² value was utilized.

¹The full models were derived by including all the enlisted ranks.

²The reduced models were derived by including the following ranks only:
Airman Basic, Airman, Airman First Class, Senior Airman/Sergeant,
Staff Sergeant, and Technical Sergeant.

³This model contained seven variables.

⁴This model contained five variables.

The technique used for examining hypothesis 1 was visual observation of the resultant optimal models for each category.

Relative Importance of the Independent Variables.

The second hypothesis required a comparative examination of the relative importance (rank order) of each variable that was common to both models (1977 and 1980) for each category. This is a refinement of the first hypothesis. Given that a particular independent variable appears in both models for a certain category, the question is, does the variable have the same relative importance in each model. The authors contend that, as with hypothesis 1, differences in the relative importance of the factors influencing the career decision, across the two surveys, may signal a trend.

The method employed for determining the relative importance of the independent variables in each model for each category was to observe the magnitude of the F value for each independent variable. The larger the value, the greater is the relative importance of that variable to that particular model. However, support for the second hypothesis requires that the two models for each category be composed of exactly the same variables. This condition relates directly to the first hypothesis which states that the two models for each category must be composed of the same independent variables.

Relative Importance Between Categories. The third hypothesis examines the relative importance (rank order) of the independent variables between the different personnel categories for 1977 and 1980. Specifically, it was hypothesized that those factors that influenced the career decision of officer and enlisted personnel were the same across all eight career categories.

Each of the 16 models was visually compared to ascertain whether or not the same variables were common between any personnel categories.

The Role of Demographics. Hypothesis number four concerns the significance of demographic variables in predicting career intent. There were 19 questions in each survey related to demographics, however, as mentioned previously, many were unsuitable for study. Subsequently, a total of four demographic questions were identified as suitable for the purposes of this study. The four are: education level (Q6), marital status (Q7), race (Q8), and sex (Q9).

Visual observation of the final models for each category yielded the information necessary to support or reject the fourth hypothesis.

CHAPTER IV

RESULTS

Introduction

This section presents the results of the data analysis described in Chapter III. The focus of this study has been on the following personnel categories: Pilot, Navigator, Scientist and Engineer, Avionic Systems Maintenance (AFSC 328XX), Aircraft System Maintenance (AFSCs 423XX and 426XX), Aircraft Maintenance (AFSC 431XX), and Armanent Systems Maintenance (AFSC 462XX). The results are presented in terms of the four hypotheses stated in Chapter II and the postulates associated with the independent variables presented in Chapter III.

Influences on the Career Decision

The first hypothesis examines the factors which have influenced the career decision of each personnel category under investigation. It was hypothesized that the factors influencing the career decision of each personnel category in 1977 would be the same in 1980. The results obtained from the eight personnel categories appear in Tables 7 through 14. The first three tables contain empirical models of career intent (derived by

multiple regression} for the officer categories, while the remaining five tables apply to the enlisted categories. Each table includes those variables which comprise the best model for the years 1977 and 1980, based on the criteria specified in Chapter III. Also included are beta coefficients for each variable in the equation, F values associated with each variable, R^2 or adjusted R^2 values for the best model along with its corresponding F value, and the unweighted sample size. The degrees of freedom associated with the overall F value of the models reflect the weighted sample size (the R^2 /adjusted R^2 value was computed based on the weighted sample size). The grades range from Second Lieutenant to Major for all officer categories and from Airmen Basic to Technical Sergeant for all enlisted categories.

Table 7 contains data for the personnel category Pilots. A comparison of the models shows a distinct difference between the two. In 1977 four variables (QJ, QN, QU, and Q6) comprised the best model for predicting the career intent of pilots, ($R^2 = .2138$, $F(4,680) = 46.23$, $p < .001$). In 1980, five variables (QM, QH, QL, QF, and QU) comprised the best model for predicting career intent ($R^2 = .2205$, $F(5,433) = 24.48$, $p < .001$). As shown in Table 7, the only variable present in both models was QU, an interactive term comprised of Job Satisfaction and Free Time Satisfaction.

TABLE 7
Multiple Regression Models of Intent to Stay
for Pilots (AFSCs 10XX, 11XX, 12XX, 13XX, 14XX)

1977	R ² = .2138	F = 46.23*	n = 620	1980	R ² = .2205	F = 24.48*	n = 372
Variable	B	F		Variable	B	F	
QJ	.0100	102.47		QM	.0012	96.97	
QN	-.0043	27.38		QH	-.0096	23.88	
QU**	.0057	26.37		QL	.0082	15.35	
Q6	.1520	12.55		QF	.0467	10.38	
				QU**	-.0102	8.96	

* $p < .001$

** Variable(s) Common in 1977 and 1980

Q6=Education

QF=Free Time Satisfaction

QH=Interaction of Job Autonomy With Health Care Satisfaction

QJ=Interaction of Economic Standard Satisfaction With Institutionalism

QL=Interaction of Job Satisfaction With Health Care Satisfaction

QM=Interaction of Job Autonomy With Institutionalism

QN=Interaction of Economic Standard Satisfaction and Health Care Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

Table 8 reflects data for the Navigator personnel category. In 1977, six variables (QJ, QC, QH, QA, QB, and QE) comprised the optimal model for predicting a Navigator's career intent ($R^2 = .3268$, $F(6,349) = 28.23$, $p < .001$), while in 1980, eight variables (Q6, QU, QN, QR, QB, QG, QQ, and QE) were determined to be the best predictors ($R^2 = .2133$, $F(8,160) = 5.42$, $p < .001$). Table 8 shows that two variables, Job Autonomy (QB) and Economic Standard Satisfaction (QE), were common to both models.

In the third category, Scientists and Engineers were examined. In 1977, six variables (Q6, QD, QF, QU, QG, and QP) comprised the optimal model for predicting the career intent of Scientists and Engineers, ($R^2 = .1915$, $F(6,324) = 12.79$, $p < .001$). In 1980, five variables (QD, QJ, QC, QN, and QL) were determined to be the best predictors of career intent, ($R^2 = .2148$, $F(5,157) = 8.58$, $p < .001$). As shown in Table 9, the only variable common to both years was Institutionalism (QD).

In the fourth category, Avionic Systems Maintenance (enlisted AFSC 328XX) personnel were examined. In 1977, eight variables (QE, QJ, QS, QT, QD, QU, QH, and QC) comprised the optimal model for predicting their career intent (Adjusted $R^2 = .4484$, $F(8,326) = 34.94$, $p < .001$). In 1980, six variables (QI, QJ, QM, QO, QQ, and QK) were determined to be the best predictors of career intent, (Adjusted $R^2 = .4682$, $F(6,310) = 47.37$, $p < .001$). Table 10 shows that the only variable common

TABLE 8
Multiple Regression Models of Intent to Stay
for Navigators (AFSCs 15XX, 22XX)

1977	R ² =.3268	F=28.23*	n=372	1980	R ² =.2133	F=5.42*	n=155
Variable	B	F		Variable	B	F	
QJ	.0018	45.86		Q6	-.2995	12.02	
QC	-.3432	28.97		QU	.0188	10.64	
QH	.0263	26.27		QN	.0133	7.75	
QA	.0731	23.36		QR	-.0219	7.71	
QB**	-.2448	20.75		QB**	.3967	6.91	
QE**	-.1427	18.87		QG	-.0082	4.98	
				QQ	-.0218	4.15	
				QE**	.2286	2.73	

* p < .001

** Variable(s) Common in 1977 and 1980

Q6=Education

QA=Job Satisfaction

QB=Job Autonomy

QC=Health Care Satisfaction

QE=Economic Standard Satisfaction

QG=Interaction of Job Satisfaction With Job Autonomy

QH=Interaction of Job Autonomy With Health Care Satisfaction

QJ=Interaction of Economic Standard Satisfaction With--
Institutionalism

QN=Interaction of Economic Standard Satisfaction With
Health Care Satisfaction

QQ=Interaction of Job Autonomy With Economic Standard
Satisfaction

QR=Interaction of Health Care Satisfaction With Free
Time Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

TABLE 9

Multiple Regression Models of Intent to Stay
for Scientists and Engineers
(AFSCs 26XX, 28XX, 30XX, 55XX)

1977	$R^2=.1915$	$F=12.79^*$	$n=354$	1980	$R^2=.2148$	$F=8.58^*$	$n=142$
Variable	B	F		Variable	B	F	
Q6	-.2314	16.90		QD**	.7607	25.01	
QD**	.2064	11.96		QJ	-.0441	16.93	
QF	-.3118	9.98		QC	-.7294	15.05	
QU	.0205	9.81		QN	.0444	11.90	
QG	.0041	8.02		QL	.0036	2.57	
QP	-.0092	5.57					

* $p < .001$

** Variable(s) Common in 1977 and 1980

Q6=Education

QC=Health Care Satisfaction

QD=Institutionalism

QF=Free Time Satisfaction

QG=Interaction of Job Satisfaction With Job Autonomy

QJ=Interaction of Institutionalism With Health Care Satisfaction

QL=Interaction of Job Satisfaction With Health Care Satisfaction

QN=Interaction of Health Care Satisfaction With
Economic Standard Satisfaction

QP=Interaction of Job Satisfaction With Institutionalism

QU=Interaction of Job Satisfaction With Free Time Satisfaction

TABLE 10
Multiple Regression Models of Intent to Stay
for Avionic Systems Maintenance (AFSC 328XX)

1977	$R^2 = .4484^+$	$F = 34.94^*$	n=55	1980	$R^2 = .4682^+$	$F = 47.37^*$	n=47
Variable	B	F		Variable	B	F	
QE	-.9421	73.17		QI	-.0189	163.78	
QJ**	.0679	58.42		QJ**	.0229	133.24	
QS	.0222	55.61		QM	-.0314	71.81	
QT	.0435	55.46		QO	.0534	61.07	
QD	-.8704	49.56		QQ	.0229	53.05	
QU	-.0368	49.35		QK	-.0404	44.58	
QH	-.0177	20.88					
QC	.2220	17.84					

* $p < .001$

** Variable(s) Common in 1977 and 1980

+ Adjusted R^2 Value

QC=Health Care Satisfaction

QD=Institutionalism

QE=Economic Standard Satisfaction

QH=Interaction of Job Autonomy With Health Care Satisfaction

QI=Interaction of Health Care Satisfaction With Institutionalism

QJ=Interaction of Institutionalism With Economic

Standard Satisfaction

QK=Interaction of Economic Standard Satisfaction With
Free Time Satisfaction

QM=Interaction of Job Autonomy With Institutionalism

QO=Interaction of Institutionalism With Free Time Satisfaction

QQ=Interaction of Job Autonomy With Economic Standard Satisfaction

QS=Interaction of Job Satisfaction With Economic Standard
Satisfaction

QT=Interaction of Job Autonomy With Free Time Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

in both years was QJ, an interactive term comprised of Institutionalism and Economic Standard Satisfaction.

In the fifth category, Aircraft Systems Maintenance (enlisted AFSC 423XX) personnel were examined. In 1977, five variables (QQ, QA, QO, Q6, and QH) comprised the optimal model, (Adjusted $R^2 = .3757$, $F(5,522) = 64.42$, $p < .001$). In 1980, six variables (QP, QS, QE, QU, RA, and QO) were determined to be the best predictors of career intent for this AFSC, (Adjusted $R^2 = .4526$, $F(6,456) = 64.69$, $p < .001$). Table 11 reflects that the only variable common to both years was QO, an interactive term comprised of Institutionalism and Free Time Satisfaction.

Table 12 contains data for the sixth category examined, Aircraft Systems Maintenance (enlisted AFSC 426XX). In 1977, seven variables (QG, QO, QP, QU, QQ, QT, and QE) comprised the optimal model (Adjusted $R^2 = .2867$, $F(7,417) = 25.35$, $p < .001$). In 1980, five variables (QF, QT, QD, QK, and QN) were determined to be the best predictors of career intent, (Adjusted $R^2 = .4872$, $F(5,399) = 77.76$, $p < .001$). The only variable common to both years was QT, an interactive term comprised of Job Autonomy and Free Time Satisfaction.

In the seventh category, Aircraft Maintenance (enlisted AFSC 431XX) personnel were examined. In 1977 (Table 13), four variables (QP, QU, QO, and QL) comprised the optimal model, ($R^2 = .3514$, $F(4,1204) = 163.08$, $p < .001$). In 1980,

TABLE 11
Multiple Regression Models of Intent to Stay for
Aircraft Systems Maintenance (AFSC 423XX)

1977	$R^2=.3757^+$	$F=64.42^*$	n=89	1980	$R^2=.4526^+$	$F=64.69^*$	n=66
Variable	B	F		Variable	B	F	
QQ	.0121	105.54		QP	-.0390	164.22	
QA	.1188	90.98		QS	-.0454	97.90	
QO**	-.0100	52.07		QE	.5646	89.35	
Q6	-1.2777	41.98		QU	.0316	60.84	
QH	-.0059	33.55		RA	-.8725	54.92	
				QO**	-.0379	54.02	

* $p < .001$

** Variable(s) Common in 1977 and 1980

+ Adjusted R^2 Value

Q6=Education

RA=Race

QA=Job Satisfaction

QE=Economic Standard Satisfaction

QH=Interaction of Job Autonomy With Health Care Satisfaction

QO=Interaction of Institutionalism With Free Time Satisfaction

QP=Interaction of Job Satisfaction With Institutionalism

QQ=Interaction of Job Autonomy With Economic Standard Satisfaction

QS=Interaction of Job Satisfaction With Economic Standard

Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

TABLE 12
Multiple Regression Models of Intent to Stay for
Aircraft Systems Maintenance (AFSC 426XX)

1977	$R^2=.2867^+$	$F=25.35^*$	$n=72$	1980	$R^2=.4872^+$	$F=77.76^*$	$n=65$
Variable	B	F		Variable	B	F	
QG	-.0289	98.15		QF	-.8179	168.97	
QO	-.0629	79.81		QT**	.0239	2.78	
QP	.0259	73.55		QD	.1859	70.69	
QU	.0267	36.77		QK	.0326	62.33	
QQ	.0235	25.88		QN	-.0103	55.00	
QT**	.0281	13.72					
QE	-.1646	8.54					

* $p < .001$

** Variable(s) Common in 1977 and 1980

+ Adjusted R^2 Value

QD=Institutionalism

QE=Economic Standard Satisfaction

QF=Free Time Satisfaction

QG=Interaction of Job Satisfaction With Job Autonomy

QK=Interaction of Economic Standard Satisfaction With
Free Time Satisfaction

QN=Interaction of Economic Standard Satisfaction With
Health Care Satisfaction

QO=Interaction of Institutionalism With Free Time Satisfaction

QP=Interaction of Job Satisfaction With Institutionalism

QQ=Interaction of Job Autonomy With Economic Standard
Satisfaction

QT=Interaction of Job Autonomy With Free Time Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

six variables (QN, QD, QS, RA, QB, and QG) were determined to be the best predictors of career intent for the personnel with this AFSC, ($R^2 = .3314$, $F(6,821) = 67.82$, $p < .001$). As shown in Table 13, no variables were common between the two models.

In the eighth and final category, Aircraft Armament Systems (enlisted AFSC 462XX) personnel were examined. In 1977, seven variables (QL, QI, QM, QR, QT, and Q6) comprised the optimal model for predicting the career intent of those personnel with that AFSC, (Adjusted $R^2 = .3629$, $F(7,327) = 28.18$, $p < .001$). In 1980, five variables (QS, QA, QN, QI, and QD) were determined to be the best predictors of career intent, (Adjusted $R^2 = .3551$, $F(5,203) = 23.91$, $p < .001$). Table 14 shows that the only variable common to both years was QI, an interactive term comprised of Health Care Satisfaction and Institutionalism.

Based on the data analysis, the empirical models for each personnel category in 1977 and 1980 were different, thus failing to support hypothesis one.

Relative Importance Within Categories

The second hypothesis examines the relative importance of the factors which have influenced the career decision within each personnel category under investigation. It was hypothesized that the relative importance of each factor would be the same in 1977 and 1980. This hypothesis was not supported by the data.

TABLE 13
Multiple Regression Models of Intent to Stay for
Aircraft Maintenance (AFSC 431XX)

1977	$R^2 = .3514$	$F = 163.08^*$	$n = 210$	1980	$R^2 = .3314$	$F = 67.82^*$	$n = 128$
Variable	B	F		Variable	B	F	
QP	.0103	243.89		QN	-.0106	128.82	
QU	.0145	137.04		QD	.1645	95.74	
QO	-.0123	61.69		QS	.0134	72.49	
QL	-.0041	46.03		RA	.8396	62.31	
				QB	.1927	50.45	
				QG	-.0097	28.93	

* $p < .001$

RA=Race

QB=Job Autonomy

QC=Health Care Satisfaction

QD=Institutionalism

QG=Interaction of Job Satisfaction With Job Autonomy

QL=Interaction of Job Satisfaction With Health Care Satisfaction

QN=Interaction of Health Care Satisfaction With Economic
Standard Satisfaction

QO=Interaction of Institutionalism With Free Time Satisfaction

QP=Interaction of Job Satisfaction With Institutionalism

QS=Interaction of Job Satisfaction With Economic Standard
Satisfaction

QU=Interaction of Job Satisfaction With Free Time Satisfaction

TABLE 14
Multiple Regression Models of Intent to Stay for
Aircraft Armament Systems (AFSC 462XX)

1977	R ² -.3629 ⁺	F=28.18 [*]	n=60	1980	R ² -.3551 ⁺	F=23.91 [*]	n=34
Variable	B	F		Variable	B	F	
QL	.0192	141.48		QS	.0402	96.62	
QI**	.0350	52.45		QA	-.5234	71.24	
QM	-.0246	44.25		QN	-.0551	57.07	
QR	-.0504	40.10		QI**	.0625	52.94	
QT	.0356	37.98		QD	-.6547	50.48	
QC	-.4539	37.09					
Q6	.8859	31.59					

* p < .001

** Variable(s) Common in 1977 and 1980

+ Adjusted R² Value

Q6=Education

QA=Job Satisfaction

QC=Health Care Satisfaction

QD=Institutionalism

QI=Interaction of Health Care Satisfaction With Institutionalism

QL=Interaction of Job Satisfaction With Health Care Satisfaction

QM=Interaction of Job Autonomy With Institutionalism

QN=Interaction of Health Care Satisfaction With Economic Standard Satisfaction

QR=Interaction of Health Care Satisfaction With Free Time Satisfaction

QS=Interaction of Job Satisfaction With Economic Standard Satisfaction

QT=Interaction of Job Autonomy With Free Time Satisfaction

In the eight categories examined, no model exhibited the same relative importance among the factors that influenced the career decision. Table 15 focuses on the first four elements of each model. It can be seen that the relative importance differs within each category for each year. This is partly explained by the failure to support the first hypothesis of this study which stated that the factors influencing the career decision would be the same between 1977 and 1980. As shown in Table 15, three personnel categories had one variable common in both years. In the Scientist and Engineering (S&E) category, QD (Institutionalism) appeared second in relative importance in 1977 while in 1980 it was ranked first. The 328XX category ranked QJ (interaction of Economic Standard Satisfaction with Institutionalism) second in relative importance in both 1977 and 1980. The 462XX category ranked QI (interaction of Health Care Satisfaction with Institutionalism) second in relative importance in 1977, while in 1980 it appeared fourth. Table 16 displays the relative importance of all common variables for each category between the two years.

Relative Importance Between Categories

The third hypothesis of this study examines the relative importance of the factors which have influenced the career decision between personnel categories. It was hypothesized that the relative importance of each factor would not differ between personnel categories. This condition was

TABLE 15
Relative Importance of Variables
by Category

Category	Relative Importance							
	1977				1980			
	1	2	3	4	1	2	3	4
Pilot	QJ	QN	QU	Q6	QM	QH	QL	QF
Navigator	QJ	QC	QH	QA	Q6	QH	QL	QF
S&E	Q6	<u>QD</u>	QF	QU	<u>QD</u>	QJ	QC	QN
328XX	QE	<u>QJ</u>	QS	QT	QI	<u>QJ</u>	QM	QO
423XX	QQ	QA	QO	Q6	QP	QS	QE	QU
426XX	QG	QO	QP	QU	QF	QT	QD	QK
431XX	QP	QU	QO	QL	QN	QD	QS	RA
426XX	QL	<u>QI</u>	QM	QR	QS	QA	QN	<u>QI</u>

Note: Four variables were selected as the basis of comparison since several of the empirical models were limited to four factors.

— Variable(s) common in 1977 and 1980

TABLE 16
Relative Importance of All Common
Variables Within Each Category

Category	Variables Common to Both Years	Relative Importance by Year	
		1977	1980
Pilot	QU	3	5
Navigator	QB	5	5
	QE	6	8
S&E	QD	2	1
328XX	QJ	2	2
423XX	QO	3	6
426XX	QD	6	2
431XX	--	--	--
462XX	QI	2	4

not supported by the data. Table 15 illustrates similarities in relative importance between the categories. Since the relative order between categories has no meaning when the variables in the equation are different, only those categories in which the first variables are identical will be addressed. These remain unaffected by the other variables which have entered the equation.

In 1977, both Pilots and Navigators perceived QJ, an interactive term comprised of Institutionalism and Economic Standard Satisfaction, as the most important factor influencing their intent to remain in the Air Force. In comparing the 1977 and 1980 results depicted in Table 15, two factors were rated number one between four different categories. Both the S&E (in 1977) and Navigators (in 1980) indicated the most important determinant of career intent was Q6 (Education). The Aircraft Maintenance (423XX) in 1980 and Aircraft System Maintenance (431XX) in 1977 categories both ranked QP, an interactive term comprised of Job Satisfaction and Institutionalism, first.

Demographic Variables

The fourth and final hypothesis of this study concerns the role of demographic variables in the prediction of career intent. It was hypothesized that the demographic variables marital status, sex, race, and education level, would be

important in predicting career intent in the eight categories under investigation.

Based on the data analysis, the fourth hypothesis was supported. The two demographic variables which appeared in the models were education (Q6), appearing four times in 1977 and once in 1980, and race (RA), appearing twice in 1980. By referring to Tables 7, 8, 9, 11, and 14, it can be seen that the education level variable appeared in five categories: Pilots (1977 data base), Navigators (1980 data base), S&E (1977 data base), Aircraft Systems Maintenance — AFSC 423XX (1977 data base), and Aircraft Armament Systems — AFSC 462XX (1977 data base). Out of the eight categories examined the appearance of Q6 in five of them suggests the importance of this variable in the prediction of career intent. The race variable was found in only two enlisted categories: Aircraft Systems Maintenance — AFSC 423XX (1980 data base) and Aircraft Maintenance — AFSC 431XX (1980 data base). The remaining two variables, marital status and sex, were not present in any category.

Postulated Relationships of Independent Variables With Career Intent

In Chapter III, the independent variables of Job Satisfaction, Job Autonomy, Health Care Satisfaction, Institutionalism, Economic Standard Satisfaction, and Free Time Satisfaction were all postulated to have a positive causal

effect on career intent. Although this was generally the case, intercorrelation matrices produced for each year and personnel category revealed several contradictions to the postulated relationships. As an example, the matrices in Table 17 show the intercorrelation coefficients between each of the six main effect variables and with career intent for pilots in 1977 and 1980. As noted, only Health Care Satisfaction, in 1977, was negatively correlated to career intent. In 1980, a positive relationship existed.

The negative correlation between Health Care Satisfaction and career intent was present in seven of the eight personnel categories; the only exception was with the Navigator groups for 1977 and 1980. The only other variables exhibiting a negative correlation with career intent were Free Time Satisfaction and Economic Standard Satisfaction. Free Time Satisfaction had a negative relationship in four categories: S&E (1980), 423XX (1977), 426XX (1980), and 462XX (1977). Economic Standard Satisfaction appeared negatively correlated in only one category — S&E (1977).

Rationally, the negative correlations with career intent do not make sense. For instance, it is not logical to presume that an AF Pilot's career intent decreases as satisfaction with health care, free time, or pay increases. Hoping to explain the negative relationships based on possible data transformation mistakes, the computer programs used in

TABLE 17

Intercorrelation Matrices Between Main Effects
and Career Intent for Pilots

<u>1977</u>							
	Q10	QA	QB	QC	QD	QE	QF
QA	.21806	-					
QB	.21326	.44736	-				
QC	-.01527	.18595	.13698	-			
QD	.40259	.33531	.37720	.13530	-		
QE	.19769	.22555	.18150	.31624	.32868	-	
QF	.20065	.18794	.14720	.23862	.27204	.28007	-

<u>1980</u>							
	Q10	QA	QB	QC	QD	QE	QF
QA	.18849	-					
QB	.26551	.32383	-				
QC	.04989	.22370	.19972	-			
QD	.40836	.28851	.40754	.25994	-		
QE	.10972	.10038	.07977	.33383	.23823	-	
QF	.15399	.23177	.09345	.24052	.26641	.27081	-

Note: QA=Job Satisfaction; QB=Job Autonomy; QC=Health Care Satisfaction; QD=Institutionalism; QE=Economic Standard Satisfaction; QF=Free Time Satisfaction; and Q10=Career Intent

this study were examined for possible data recode errors. A close investigation of each program revealed no errors, therefore, this idea was disregarded. The authors can offer no explanation for the negative relationships exhibited by some of the variables.

As shown in Table 17, the correlations between the main effect variables indicate that the magnitude of the relationships are relatively low to moderate for pilots. In 1977, the largest correlation coefficient (.44736) was between Job Satisfaction (QA) and Job Autonomy (QB). In 1980, the largest correlation value (.40754) was between Job Autonomy (QB) and Institutionalism (QD). A review of the correlation matrices for the remaining seven personnel categories shows similar moderate to low relationships among the main effect variables.

Summary of Research Results

The first hypothesis of this study stated that the factors influencing the career intent of the personnel in the eight categories under investigation were the same in 1977 and 1980. Table 18 provides a comparison of the empirical models derived for both the officer and enlisted groups. The table shows that the factors for 1977 differed consistently from those for 1980. In six of the eight categories one variable was common for both years, while the Navigator models exhibited two factors in common. One

TABLE 18
The Sixteen Empirical Models by
Category and by Year

	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ
Pilots	1977																									
	1980																									
Navigators	1977																									
	1980																									
Scientists and Engineers	1977																									
	1980																									
Avionics Systems Maintenance	1977																									
	1980																									
Aircraft Systems Maintenance (423)	1977																									
	1980																									
Aircraft Systems Maintenance (426)	1977																									
	1980																									
Aircraft Maintenance	1977																									
	1980																									
Aircraft Armament Systems	1977																									
	1980																									

Note: Table 2 in Chapter III, provides a complete decoding for each of the 26 variables.

category, Aircraft Systems Maintenance (AFSC 431XX) had no common variables across the years, 1977 to 1980. Subsequently, due to the overwhelming lack of supportive evidence, hypothesis one was rejected.

The second hypothesis stated that the relative importance (i.e., rank order based on the magnitude of the respective F values) of the factors within each personnel category model was the same for both years, i.e., the rank order of the factors that predicted a pilot's career intent in 1977 did not change for 1980. The support for this supposition was highly dependent on the acceptance of hypothesis one. Since hypothesis one was rejected, hypothesis two was also rejected. None of the models developed within each category was identical between the two years, thereby negating any possibility of comparing the relative importance of the various variables.

The third hypothesis focused on the relative importance of the factors (i.e., rank order based on the magnitude of the respective F values) influencing an Air Force member's career intent between the different personnel categories. Specifically, the authors posited that there would be no difference in the relative importance between the eight personnel categories, i.e., the factors that predicted a pilot's career intent would be the same as the factors which predicted the career intent of an Avionics Systems Maintenance

technician. Since none of the models were identical this hypothesis was also rejected.

The final hypothesis addressed the importance of demographic variables in predicting career intent. Specifically, the authors postulated that an Air Force member's career intent could be predicted by knowing their education level, marital status, race, and sex. The results of this study supported this hypothesis due to the appearance of two demographics (education level and race) in seven of the sixteen models. As indicated in Table 19, Q6 (education) was the most significant predictor in two models (1980 Navigator and 1977 S&E), and appeared in a less significant role in three other models. The race variable (RA) appeared in two different models as depicted in Table 19.

Next, the postulated relationships of the main effect variables with career intent were investigated by examining the intercorrelation matrix of each year and personnel category. In general, the positive relationship postulated between the six independent variables and the criterion was found in most models although several discrepancies were noted. Health Care Satisfaction appeared to be the most predominant exception while Free Time Satisfaction and Economic Standard Satisfaction also appeared.

This concludes the presentation of the results obtained from the data analysis. The next chapter discusses these findings, renders interpretations, and offers recommendations.

TABLE 19
The Role of Demographics in
Predicting Career Intent

Category	Model Year	Variable	Relative Importance	Total Number of Variables in Model	Variable F Value
Pilots	1977	Q6	4	4	12.55
Navigators	1980	Q6	1	8	12.02
S&E	1977	Q6	1	6	16.90
Avionics Systems Maintenance					
Aircraft Systems Maintenance (423)	1977	Q6	4	5	41.98
Aircraft Systems Maintenance (431)*	1980	RA	5	6	54.92
Aircraft Maintenance	1980	RA	4	6	62.31
Aircraft Armament Systems	1977	Q6	7	7	31.59

* No demographics present in the 1977 or 1980 models.
Q6-Educational Level
RA-Race

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Introduction

As discovered in this study, the determinants of an Air Force member's career intent are many and diverse. Of the theoretical models discussed in Chapter II, most contained a complex assortment of variables (see Steer's model and Martin's model). In this study, the majority of the variables in the 16 models examined consisted of interactions, thus reflecting the complex relationships involved in attempting to predict career intent.

Table 20 provides a condensation of all the variables comprising the 16 models and provides the basis for much of the discussion section. The 25 independent variables incorporated in this study were condensed back into the six main effect variables, plus one category labeled demographics. The numbers in each square represent the summation of the frequency of occurrence of each particular variable in any of the 16 models, either as a main effect term or in interaction with another factor.

The discussion that follows focuses on differences in the models for each category between the two years, 1977

TABLE 20

Frequency of Occurrence of the Variables Studied,
Either as a Main Effect or as an Interactive Term

Variables Categories	1977					1980				
	JS	JA	HCS	I	ESS	FTS	D	JS	JA	HCS
Pilots	1		1	1	2	1	X	2	2	2
Navigators	M	1M	1M	1	1M			2	2M	2
Scientists & Engineers	3	1		1M		1M	X	1		2M
Officer Sub Totals	5	3	3	4	4	3	2	5	5	7
Avionics Systems Maintenance	2	2	1M	1M	2M	3		2	1	4
Aircraft Systems Maintenance(423)	M	2	1	1	1	1	X	3		2
Aircraft Systems Maintenance(426)	3	3		2	1M	3			1	1
Aircraft Maintenance	3		1	2		2		2	1M	1
Aircraft Armament Systems	1	2	3M	2		2	X	1M		2
Enlisted Sub Totals	10	9	8	9	6	11	2	7	5	5
Totals	15	12	11	13	10	14	4	12	10	12

Note: The numbers depicted in the text of the table indicate the frequency of appearance of that variable as part of an interactive term; "M" indicates occurrence of a main effect term; "X" indicates the presence of one demographic variable in the model. The abbreviations used in the table are defined as: JS-Job Satisfaction, JA-Job Autonomy, HCS-Health Care Satisfaction, I-Institutionalism, ESS-Economic Standard Satisfaction, FTS-Free Time Satisfaction, D-Demographic.

and 1980; overall differences between the 1977 and 1980 officer and enlisted categories; and differences between officer and enlisted models.

Differences Between the Years for Officer Categories

Pilots. The appearance of Economic Standard Satisfaction in two of the three interactions and the interaction of Health Care Satisfaction with Economic Standard Satisfaction suggests the importance of pay and benefits variables to career intent for Pilots in the 1977 model.

In the 1980 model, all four of the interactions involved Job Satisfaction or Job Autonomy. In contrast to the 1977 model, these relationships suggest a de-emphasis of pay and benefits and an increased emphasis on job related variables. Economic Standard Satisfaction did not appear in the 1980 model.

Navigators. In the 1977 model, the variables concerned with pay (Economic Standard Satisfaction), the job (Job Autonomy and Job Satisfaction) and benefits (Health Care Satisfaction) exerted main effects on the intent to remain. The two interaction terms involved pay with Institutionalism and Job Autonomy with benefits.

For the 1980 sample, the only similar main effect variables (to the 1977 model) were Job Autonomy and pay (Economic Standard Satisfaction). Education, a demographic variable, was an important predictor of career intent that

was not found in the 1977 model. Although Job Satisfaction did not emerge as a main effect variable as in 1977, it exerted interactive effects in one case with Job Autonomy and in another case with a life style variable (Free Time Satisfaction) which was not present in the 1977 model. The appearance of pay interacting with Job Autonomy was not observed for 1977. Benefits (Health Care Satisfaction) had only interactive effects, once with pay and once with Free Time Satisfaction.

Scientists and Engineers. The 1977 model was marked by the fact that the pay and benefits variables did not appear. The factors that predicted the career intent of this group centered on the job (Job Satisfaction and Job Autonomy), the Air Force as a way-of-life (Institutionalism), and the esoteric life-style variable (Free Time Satisfaction).

The 1980 model reflects a major shift. Whereas the pay and benefits variables did not appear in the 1977 model, in 1980 they appeared more frequently than any other factors. The only job related variable to appear, Job Satisfaction, interacted with Health Care Satisfaction.

Overall Differences Between Years for the Officer Categories

A further analysis was conducted which involved a comparison of the relative frequency that a given variable was involved as a main effect or in interaction in the models for each of the three officer categories. For 1977 and 1980,

the rank order of the variables based on their presence in the models is as follows:

<u>VARIABLES</u>	<u>RANKING</u>
<u>1977</u>	
Job Satisfaction	1
Institutionalism, Economic Standard Satisfaction	2
Job Autonomy, Health Care Satisfaction, Free Time Satisfaction	3
Demographics	4
<u>1980</u>	
Health Care Satisfaction	1
Job Satisfaction, Job Autonomy, Economic Standard Satisfaction	2
Free Time Satisfaction	3
Institutionalism	4
Demographics	5

The most notable change occurred in the area of benefits (Health Care Satisfaction), from a mediocre third place in 1977, vaulting to first place in 1980. This shift may reflect an increased perception of the erosion of the benefits associated with an Air Force career. Air Force policy makers should take note.

From 1977 to 1980, Air Force officers seemed to go through reconceptualizations of the Air Force as a way-of-life. Based on the fact that the job related factors (Job Satisfaction

and Job Autonomy) remained relatively unchanged in their rank ordering, and the de-emphasis of the Institutionalism factor, the results indicate a shift in an Air Force officer's view of his/her career. The change appears to be in the direction of the Air Force as an occupation rather than a way-of-life. This suggests a change of emphasis from an institutional orientation toward an occupational reference (Moskos, 1977).

Differences Between Years for the Enlisted Categories

Avionics System Maintenance. In the 1977 model, eight variables were involved in this categories' decision to remain in the Air Force (see Table 10). Three of the variables exerted main effects on intent to stay while the remaining five acted interactively. The main effects variables, as shown in Table 20, were Economic Standard Satisfaction, Institutionalism, and Health Care Satisfaction. Those emerging as interactive terms were relatively evenly distributed across the six attitudinal variables. The two variables with the highest frequency of occurrence were Economic Standard Satisfaction (pay) and Free Time Satisfaction. Pay appeared as a main effect variable and also interactively with Institutionalism and Job Satisfaction. Free Time Satisfaction interacted with Job Satisfaction, Job Autonomy, and Health Care Satisfaction.

In 1980, six variables were an important influence on intent to remain in the Air Force (see Table 10). As

shown in Table 20, main effect variables were not a concern in the career decision, only interactive ones. The two interactive terms with the highest frequency of occurrence were Institutionalism and Economic Standard Satisfaction. Institutionalism exerted influence on Job Autonomy, Economic Standard Satisfaction, Health Care Satisfaction, and Free Time Satisfaction. Pay acted interactively with Institutionalism, Job Autonomy, and Free Time Satisfaction. A comparison of the two years shows that a major change occurred in 1980. The life style orientation (Free Time Satisfaction) shifted to a way-of-life reference (Institutionalism). The concern for pay was present as an important influence for both samples.

Aircraft System Maintenance (AFSC 423XX). In 1977, the predictive model for this category was represented by five variables: one main effect, one demographic, and three interactive terms (see Table 11). As shown in Table 20, these five variables were fairly evenly distributed across the seven elements that comprise the table. As demonstrated by the frequency of occurrence, Job Autonomy received slightly greater emphasis in 1977. This job oriented variable interacted with Economic Standard Satisfaction and Health Care Satisfaction. The main effect and demographic variables appearing were Job Satisfaction and Education, respectively.

In 1980, the predictive model for this category was comprised of six variables: one main effect, one demographic and four interactions (see Table 11). As displayed in Table 20, the only main effect variable is Economic Standard Satisfaction. Those emerging as interactive terms were Job Satisfaction, Institutionalism, Economic Standard Satisfaction, and Free Time Satisfaction. The demographic variable was Race. Job Satisfaction had the highest frequency of occurrence emphasizing a significant shift in importance from 1977. Job Autonomy and Health Care Satisfaction were not a concern in this sample, while the pay, institutionalism and life style variables all realized increased emphasis over the 1977 group.

Aircraft System Maintenance (AFSC 426XX). In 1977, this group's career decision was based on seven variables comprised of one main effect, and six interactive terms (see Table 12). As shown in Table 20, the predictors of career intent in 1977 were evenly distributed between all variables except Health Care Satisfaction and demographics. The frequency of occurrence of the variables presented in Table 20 amplifies the importance AF members placed on job related factors (Job Satisfaction and Job Autonomy) and the life style variable (Free Time Satisfaction).

In 1980, the predictive model derived for career intent was comprised of five variables: two main effects and

three interactions (see Table 12]. As shown in Table 20, Free Time Satisfaction and Institutionalism exerted main effects on intent to remain while Job Autonomy, Free Time Satisfaction, Economic Standard Satisfaction, and Health Care Satisfaction acted interactively. Job Satisfaction and demographics did not appear as an influence during this period.

In comparing the two years, Table 20 shows that all variables, with the exception of Free Time Satisfaction and Economic Standard Satisfaction, decreased in occurrence in 1980. The life style variable now assumed the role of the most significant predictor, and pay exerted a greater influence on intent to remain.

Aircraft Maintenance. In 1977, four interactive variables represented the best predictive model for this sample (see Table 13). Table 20 shows that Job Satisfaction occurred the most frequently, followed by Institutionalism and Free Time Satisfaction. The benefit variable (Health Care Satisfaction) appeared only once. Job Autonomy, pay, and demographics were not an influence on this category's career decision.

In 1980, six variables played an important role in the member's decision to remain in the Air Force (see Table 13). Two of the variables exerted main effects on intent to stay, three were interactive, and one was a demographic. As shown

in Table 20, all of the factors were fairly evenly distributed between the variables comprising the table. The only exception was Free Time Satisfaction which did not appear in the model. The greatest emphasis in 1980, based on the frequency of occurrence, was placed on job related factors, (Job Satisfaction and Job Autonomy) and pay. In 1977, Job Satisfaction was the most important predictor, but in 1980 that emphasis was shared equally among Job Satisfaction, Job Autonomy and Economic Standard Satisfaction.

Aircraft Armament Systems. The 1977 model derived for this category was comprised of seven variables: one main effect, five interactive effects, and one demographic (see Table 14). The frequency of occurrence of a variable in the model as shown in Table 20, depicts benefits (Health Care Satisfaction) as the most important factor in 1977, followed by Job Autonomy, Institutionalism, and Free Time Satisfaction. The absence of the pay variable suggests it had no influence on career intent during this period.

In 1980, five variables comprised the best predictive model for this category (see Table 14). As shown in Table 20, two of the variables in the model were main effects, with the remainder being interactive terms. The importance of all the variables in the model appeared to be equal, based on frequency of occurrence. As noted by the table, Job Autonomy, Free Time Satisfaction and demographics

did not appear as predictors in 1980. When compared to the 1977 period, it can be seen that the job factor (Job Autonomy) benefits, and the life style variable (Free Time Satisfaction) decreased in 1980, while pay increased twofold.

Overall Differences Between Years for the Enlisted Categories

Based on the frequency of occurrence, both as main effects and in interaction, the relative importance of all the variables that predicted the career intent of the personnel in the five enlisted categories for 1977 and 1980, respectively, were as follows:

<u>VARIABLES</u>	<u>RANKING</u>
<u>1977</u>	
Free Time Satisfaction	1
Job Satisfaction	2
Job Autonomy, Institutionalism	3
Health Care Satisfaction	4
Economic Standard Satisfaction	5
Demographics	6
<u>1980</u>	
Economic Standard Satisfaction	1
Institutionalism	2
Job Satisfaction, Free Time Satisfaction	3
Job Autonomy, Health Care Satisfaction	4
Demographics	5

For the enlisted categories as a whole, the major change between 1977 and 1980 was reflected in the prodigious jump in frequency of occurrence of the pay variable (Economic Standard Satisfaction). In 1977, pay appeared only six times (interactively four times and as a main effect twice), three of which were in one model (Avionics Systems Maintenance). As depicted in Table 20, the only variables to occur less frequently than pay were the demographics (education level and race). In 1980, pay occurred more frequently than any other variable. It (Economic Standard Satisfaction) was either the most significant or second most significant predictor of career intent in four out of the five enlisted models, thus serving to underscore its importance. The pay variable replaced the job related variables (Job Satisfaction and Job Autonomy) which had ranked as the most significant predictors in 1977, but dropped to third, in 1980.

A surprising change occurred regarding the "benefits" variable (Health Care Satisfaction). Considering the importance of pay as a predictor of enlisted career intent in 1980, one might presume that the benefits variable would also be of similar significance. This proved not to be the case, as Health Care Satisfaction ranked lower in 1980 than it had in 1977. It occurred more frequently than only demographics. As revealed in Chapter IV, Health Care Satisfaction correlated negatively with career intent on

numerous occasions. A possible explanation for this might be, that at the time of completing the survey, the preponderance of attitudes were dominated by perceived low levels of wages and high rates of inflation. Irregardless, benefits did not play a significant role in predicting the career intent of enlisted personnel in 1980.

Unlike officers, the enlisted groups seem to view an Air Force career as a way-of-life rather than a job, as reflected in the frequency of occurrence of the "way-of-life" variable (Institutionalism) and the job related variables (Job Satisfaction and Job Autonomy). In 1977, all three variables appeared in relatively equal numbers (see Table 20). However, in 1980, the frequency of appearance of Institutionalism increased slightly, while the job related factors exhibited a marked decrease. This is in contrast to Moskos' (1977) contention that the military is moving from "a predominately institutional format to one more resembling that of an occupation.

Officer Versus Enlisted Models. Table 21 provides a summary of the rankings, by variable, for the officer and enlisted categories. The rankings are based on the frequency of appearance, in any of the eight models for each year (1977 or 1980), of each variable, whether as a main effect term or interactively.

TABLE 21

The Relative Importance (Based on Frequency of Occurrence) of All Variables, as it Relates to the Officers and Enlisted Personnel Groupings

Variables	Officer Ranking	Enlisted Ranking
<u>1977</u>		
Job Satisfaction	1	1
Job Autonomy	3	2
Health Care Satisfaction	3	3
Institutionalism	2	2
Economic Standard Satisfaction	2	5
Free Time Satisfaction	3	2
Demographics	4	5
<u>1980</u>		
Job Satisfaction	2	3
Job Autonomy	2	4
Health Care Satisfaction	1	4
Institutionalism	4	2
Economic Standard Satisfaction	2	1
Free Time Satisfaction	3	3
Demographics	5	5

In 1977, both officers and enlisted were influenced to remain by a mixture of job oriented factors (Job Satisfaction and Job Autonomy) and Institutionalism. However, and surprisingly, the officers were influenced by pay whereas the enlisted groups were not as influenced. The reason for this disparity may lie in the officer job categories examined. All three, but especially Pilots, and Scientists and Engineers, are represented in civilian industry as professionals, commanding comparatively large salaries. The personnel composing the three officer categories examined in this study may have perceived a greater monetary worth as a civilian, thereby reflecting this attitude by placing great importance on pay (Economic Standard Satisfaction) as a predictor of their career intent.

In 1980, pay influenced both officer and enlisted personnel to remain. However, the similarities ended here as the officers placed the greatest significance on benefits while the enlisted groups considered the way-of-life variable (Institutionalism) the most important. The officers ranked Institutionalism next-to-last, thus supporting the Moskos (1977) contention that the military is moving from a way-of-life orientation toward an occupational reference. Perhaps retention might be increased if the officer viewpoint could be reversed, i.e., toward looking at the Air Force as a way-of-life.

The authors recommend, as a method for accomplishing this, that Air Force policy makers work toward stemming the erosion of military benefits. As reflected in its number one ranking in 1980, the officer groups placed great importance on the benefits aspect of their careers. The authors specifically encourage the adoption of more comprehensive medical and dental care for dependents. If adopted, such a program may cause an officer (or enlisted person) to think more carefully about giving up such benefits by leaving the Air Force.

Conclusions and Recommendations

Of the many illations emanating from this study, perhaps two bear particular importance to Air Force policy makers. The first is that predictive models of career intent are group specific, and secondly, that the factors which predict career intent for a specific personnel category may change drastically over time.

Based upon the findings of this study and supported by Young's research (1980), the authors conclude that there is no one overall best model for predicting career intent in organizations such as the Air Force. The authors feel that predictive models for describing the factors which have an influence on career intent should be group specific, as empirically demonstrated in this research by the resulting 16 different models. This study clearly shows that the factors

that were important to one group did not reflect the same level of importance to any other group. The fact that personnel in similar job specialties, i.e., Aircraft Systems Maintenance (AFSCs 423XX and 426XX), based their career intentions on different factors lends further credence to this contention.

This suggests that retention and turnover problems in specific career fields should be dealt with individually. It is the authors' opinion that Air Force policies designed to remedy "overall" retention problems will be less effective than group-specific-solutions. There can be no Air Force-wide, broad policies or programs instituted with the hope that they will have the desired effect on all personnel. For instance, in 1980, based on the frequency of appearance, the Pilots did not seem overly concerned with pay (Economic Standard Satisfaction did not enter the model), while Avionics Systems Maintenance personnel (also in 1980), considered it the most important determinant of their career intent (see Table 10). In contrast, for 1980, Health Care Satisfaction was the most significant variable for the Pilots and the least significant for the Avionics Systems Maintenance. Each variable represents a form of remuneration although one represents a benefit and the other a wage or salary.

Thus, a program designed to increase benefits may cause more Pilots to remain in the service, while not preventing more Avionics Systems Maintenance personnel from leaving.

Perhaps a more appropriate approach might be a pay/benefits package. An even better approach, one that, fortunately, seems to be gaining acceptance, is the targeting of policies at specific groups, i.e., the military pay raise given in October, 1981, was targeted, with the largest increases going to the ranks experiencing the greatest manpower deficiencies.

Another significant outcome that emerged from this study was the overwhelming evidence of the dynamic nature of the factors influencing the career intent of the Air Force personnel categories investigated. From 1977 to 1980 the factors that predicted career intent changed dramatically. The authors feel that these changes are reflective of the environment and human nature. As the environment changes (i.e., the economy, interest rates, world tensions, etc.) a person's opinion or attitude may change.

Therefore, Air Force policy makers should not assume that the member's intrinsic and extrinsic needs remain static over any length of time. Responses to survey questions represent a snapshot of the respondent's attitudes and opinions up to that point in time. To more effectively capture these dynamic attitudes and opinions, the authors recommend that attitudinal and demographic data be collected, periodically, for each applicable job category in the Air Force. As the new data becomes available, the models for each category could be updated. This would help insure

accurate, timely data, thus allowing each Air Force functional manager to better predict the career intentions of the personnel for he/she is responsible. Subsequently, this should lead to more appropriate input to policy making, resulting in more effective programs, tailored toward an individual's needs, rather than the Air Force as a whole.

Two factors, Job Satisfaction and Institutionalism, appeared in each of the 1977 models, either as main effects or interactively. In 1980, however, no one single factor appeared in all eight models. Three factors, Institutionalism, Health Care Satisfaction, and Economic Standard Satisfaction, did appear in seven of the eight models, although all three variables were not present in the same seven models. This serves to underscore the diversity of factors that predict Air Force member's career intent.

The results of this research effort also indicate, for the enlisted categories, a continued high level of emphasis on pay and benefits. This supports the findings of an Airman Exit Survey conducted in 1981 ("Air Force Military," 1981), in which dissatisfaction with pay was the preeminent reason for leaving the Air Force (see Chapter II). The exiting Airmen perceived a large disparity between what they received as pay and benefits, and what was available for equivalent work as a civilian.

Based on these Exit Surveys, the Air Force Military Personnel Center (AFMPC) deemed the most important factors in keeping airmen in the Air Force as: increased pay, improved supervisor sensitivity, and increased promotion opportunities, in that order. The results of this study correlate closely with the AFMPC findings. The most frequently occurring variables, for the enlisted categories, in this study were (in order): Economic Standard Satisfaction (pay), and Institutionalism (includes the member's perceptions of the quality of Air Force Leaders and his/her promotion opportunities). These similar findings indicate the predominance of these factors in the career decisions of Air Force enlisted personnel and should figure accordingly in policy or program decisions.

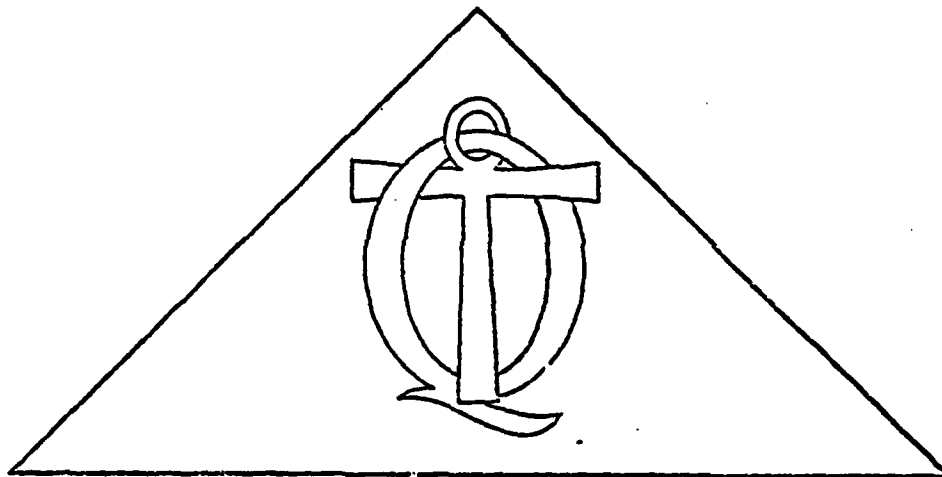
As with any research, the results of this effort may have raised more questions than it answered. Consequently, the authors recommend that research be continued in the area of predicting career intent/turnover in the Air Force. With forecasts of dwindling numbers of qualified men in the future, a better understanding of individual needs, attitudes, and opinions is necessary so that the Air Force can successfully compete with the other military services and civilian industry for this valuable resource. Toward this end, the authors recommend building a survey designed to measure those areas that have been shown to predict career intent. The

survey might include questions designed to measure attitudes and opinions associated with the variables/models presented in Chapter II.

A new, updated AFQOL survey is scheduled for distribution sometime in 1982. A three-way, comparative study involving the 1977, 1980, and 1982 AFQOL data bases should reveal new insights into predicting an Air Force Member's career intent.

APPENDIX A
QUALITY OF AIR FORCE LIFE SURVEYS FOR 1977 AND 1980

UNITED STATES AIR FORCE
QUALITY OF AIR FORCE LIFE
ACTIVE DUTY
AIR FORCE PERSONNEL SURVEY



SECOND EDITION

USAF SCN 77-37
MARCH 1977

LEADERSHIP/MOTIVATION DIVISION
HUMAN RESOURCES DEVELOPMENT
DIRECTORATE OF PERSONNEL PLANS
HQ UNITED STATES AIR FORCE

1-2. Your survey administrator will provide you with a 2-letter code for your base. Mark the first letter of this code in item 1 and the second letter in item 2 of your answer sheet.

3. What is your present active duty grade?

- | | |
|--------------------------|---------------------------|
| A. Colonel | I. Senior Master Sergeant |
| B. Lieutenant Colonel | J. Master Sergeant |
| C. Major | K. Technical Sergeant |
| D. Captain | L. Staff Sergeant |
| E. First Lieutenant | M. Sergeant |
| F. Second Lieutenant | N. Senior Airman |
| G. Warrant Officer | O. Airman First Class |
| H. Chief Master Sergeant | P. Airman |
| | Q. Airman Basic |

4. What is your command of assignment (the command that maintains your personnel records)?

- | | |
|--|---|
| A. Alaskan Air Command | N. Air Force Data Automation Agency |
| B. U.S. Air Force Academy | O. Headquarters Command |
| C. Aerospace Defense Command | P. Military Airlift Command |
| D. U.S. Air Forces in Europe | Q. Pacific Air Forces |
| E. Air Force Accounting and Finance Center | R. Strategic Air Command |
| F. Air Force Logistics Command | S. Tactical Air Command |
| G. Air Force Systems Command | T. USAF Security Service |
| H. Air Reserve Personnel Center | U. Air Force Military Personnel Center |
| I. Air Training Command | V. Air Force Inspection and Safety Center |
| J. Air University | W. Air Force Audit Agency |
| K. Headquarters Air Force Reserve | X. Air Force Office of Special Investigations |
| L. Headquarters USAF | Y. Other |
| M. Air Force Communications Service | |

5. How much total active federal military service have you completed?

- | | |
|------------------------------|------------------------------|
| A. Less than 1 year | O. 16 years but less than 17 |
| B. 1 year but less than 2 | R. 17 years but less than 18 |
| C. 2 years but less than 3 | S. 18 years but less than 19 |
| D. 3 years but less than 4 | T. 19 years but less than 20 |
| E. 4 years but less than 5 | U. 20 years but less than 21 |
| F. 5 years but less than 6 | V. 21 years but less than 22 |
| G. 6 years but less than 7 | W. 22 years but less than 23 |
| H. 7 years but less than 8 | X. 23 years but less than 24 |
| I. 8 years but less than 9 | Y. 24 years but less than 25 |
| J. 9 years but less than 10 | Z. 25 years but less than 26 |
| K. 10 years but less than 11 | 1. 26 years but less than 27 |
| L. 11 years but less than 12 | 2. 27 years or more |
| M. 12 years but less than 13 | |
| N. 13 years but less than 14 | |
| O. 14 years but less than 15 | |
| P. 15 years but less than 16 | |

6. What is your highest level of education now (include accepted GED credits)?

- Some high school (did not graduate)
- High school graduate (no college)
- Trade or technical school (no college)
- Some college, but less than one year
- One year college, but less than two
- Two years college, but less than three (including two-year associate degree)
- Three years or more college, no degree
- Registered nurse diploma program
- College degree (BS, BA, or equivalent, except LL.B)
- Graduate work beyond bachelor degree (no master's degree)
- Master's degree
- Postgraduate work beyond master's degree
- Doctorate degree (includes LL.B, J.D., D.C.S., M.D., and D.V.M.)

7. What is your marital status?

- A. Married and spouse is not a member of a military service
- B. Married and spouse is a member of a military service
- C. Never been married
- D. Divorced and not remarried
- E. Legally separated
- F. Widower/widow

8. Was (or is) your father a career military member?

- A. No
- B. Yes

9. Are you a regular or reserve officer?

- A. Not applicable, I am enlisted
- B. Reserve
- C. Regular

10. What was the source of your commission?

- A. Not applicable, I am enlisted
- B. OTS
- C. OCS
- D. ROTC
- E. AECF
- F. Aviation Cadet
- G. Navigation Cadet
- H. USAFA
- I. USMA
- J. USNA
- K. Other

11. How many dependents do you have? Do not include yourself.

- A. None
- B. One
- C. Two
- D. Three
- E. Four
- F. Five
- G. Six
- H. Seven
- I. Eight or more

12. Which one of the following do you consider yourself?

- A. Black
- B. Spanish Speaking Origin (Cuban, Puerto Rican, Mexican American, Spanish Descent)
- C. American Indian
- D. Asian Origin (Chinese, Japanese, Korean, Filipino or Asian American)
- E. White (Other than Spanish Speaking Origin)
- F. Other

13. What is your sex?

- A. Male
- B. Female

14. Which one of the following best describes your attitude toward making the Air Force a career?

- A. Definitely intend to make the Air Force a career
- B. Most likely will make the Air Force a career
- C. Undecided
- D. Most likely will not make the Air Force a career
- E. Definitely do not intend to make the Air Force a career

15. Enter the code for the first digit of your duty Air Force Specialty Code (AFSC) opposite item 15 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

16. Enter the code for the second digit of your duty AFSC opposite item 16 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

17. Enter the code for the third digit of your duty AFSC opposite item 17 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

18. What is your current primary aeronautical rating?

- A. Pilot
- B. Navigator
- C. Flight Surgeon
- D. Other aeronautical rating
- E. Nonrated

19. What shift do you normally work?

- A. Day shift
- B. Swing shift
- C. Graveyard shift
- D. Rotate shifts

The following four questions address the subjects of economic standard and security. Please rate the degree of importance of these concepts to you and your degree of satisfaction with them based on the descriptions shown below:

ECONOMIC STANDARD: Satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

20. What degree of importance do you attach to the above? (Select one of the seven points on the importance scale)

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

21. To what degree are you satisfied with the ECONOMIC STANDARD aspects of your life? (Select one of the seven points on the satisfaction scale)

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

ECONOMIC SECURITY: Guaranteed employment; retirement benefits; insurance; protection for self and family.

22. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

23. To what degree are you satisfied with the ECONOMIC SECURITY aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

24. Do you hold a second job?

A. No

Yes, I work

- B. 1-5 hours per week
- C. 6-10 hours per week
- D. 11-20 hours per week
- E. 21-30 hours per week
- F. over 30 hours per week

25. Does your spouse work?

A. Not applicable, I am not married or I am legally separated

I am married and my spouse

- B. Resides with me, and has a paying job
- C. Resides with me, and does not work
- D. Does not reside with me, and has a paying job
- E. Does not reside with me, and does not work

26. The main reason that I have a second job, and/or that my spouse works is that we have to in order to make ends meet.
- A. Not applicable
 - B. Strongly disagree
 - C. Disagree
 - D. Undecided
 - E. Agree
 - F. Strongly agree
27. Do you or your dependents, if any, currently receive Federal, state, county, civic, or community (public) assistance?
- A. No
 - B. Yes, food stamps only
 - C. Yes, monetary payments only
 - D. Yes, food only
 - E. Yes, combination of the above
 - F. Yes, other
28. Are you now eligible for and do you receive food stamps?
- A. I am not eligible for food stamps
 - B. I am eligible for food stamps but do not use them
 - C. I am now receiving and using food stamps
 - D. I do not know if I am eligible for food stamps; but, I would not use them if I were eligible
 - E. I do not know if I am eligible for food stamps; but I would use them if I were eligible
29. How do you think your military pay (including all allowances and fringe benefits) compares with pay in civilian employment for similar work?
- A. Military pay is far higher than civilian
 - B. Military pay is somewhat higher than civilian
 - C. Both about equal
 - D. Military pay is somewhat less than civilian
 - E. Military pay is far less than civilian
30. If I left the Air Force tomorrow, I think it would be very difficult to get a job in private industry with pay, benefits, duties, and responsibilities comparable with those of my present job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree

31. The Air Force is providing enough information to its members to permit them to determine the current status of actions which may impact on their fringe benefits (commissary, retirement, medical care, etc.)

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

The following is a list of some Air Force benefits. Using the scale shown below, please indicate the importance of each benefit to you and your family now. Be sure the item number on your answer sheet is the same as the item number you are answering on the survey booklet.

	<u>Low</u> <u>Importance</u>		<u>Medium</u> <u>Importance</u>			<u>High</u> <u>Importance</u>		<u>Undecided,</u> <u>Don't know</u>
32. 30-days annual leave	A	B	C	D	E	F	G	H
33. Base exchange	A	B	C	D	E	F	G	H
34. Base housing	A	B	C	D	E	F	G	H
35. Military hospitals	A	B	C	D	E	F	G	H
36. Commissary	A	B	C	D	E	F	G	H
37. CHAMPUS	A	B	C	D	E	F	G	H
38. Legal assistance	A	B	C	D	E	F	G	H
39. Education and training	A	B	C	D	E	F	G	H
40. Survivor benefits	A	B	C	D	E	F	G	H
41. Dependents indemnity compensation	A	B	C	D	E	F	G	H
42. Retirement	A	B	C	D	E	F	G	H
43. Travel and transportation entitlements	A	B	C	D	E	F	G	H
44. Income tax advantage	A	B	C	D	E	F	G	H
45. Insurance discounted	A	B	C	D	E	F	G	H
46. Recreation facilities	A	B	C	D	E	F	G	H
47. Veterans benefits (GI Bill, etc.)	A	B	C	D	E	F	G	H

Listed below are a number of factors which have been associated with favorable attitudes toward an Air Force career.

FAVORABLE FACTORS

- A. Opportunity for training and education in the Air Force
- B. My Air Force job (challenging, provides sense of accomplishment, etc.)
- C. Pay and allowances
- D. Housing
- E. Promotion system and opportunity
- F. Fringe benefits (medical and dental care, BX, commissary, etc.)
- G. Leadership and supervision in the Air Force
- H. Travel and new experiences
- I. Have "say" in future assignments
- J. Security of Air Force life
- K. Air Force policies and procedures
- L. The retirement system
- M. Opportunity to serve my country
- N. Some other factor
- O. I do not intend to make the Air Force a career

48. Select the one factor which TODAY would influence you the most to make the Air Force a career.

Listed below are a number of factors which have been associated with unfavorable attitudes toward an Air Force career.

UNFAVORABLE FACTORS

- A. Family separation
- B. My Air Force job (little challenge, little sense of accomplishment, etc.)
- C. Pay and allowances
- D. Housing
- E. Promotion selection system
- F. Promotion opportunity
- G. Fringe benefits (medical and dental care, BX, commissary, etc.)
- H. Leadership and supervision in the Air Force
- I. Frequent PCS moves
- J. Little "say" in future assignments
- K. Insecurity of Air Force life
- L. The people
- M. Air Force policies and procedures
- N. Some other factor
- O. Nothing unfavorable

49. Select the one factor which TODAY would influence you the most NOT to make the Air Force a career.

50. An Air Force base is a desirable place to live.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of free time to you and your degree of satisfaction with it based on the following description:

FREE TIME: Amount, use, and scheduling of free time alone, or in voluntary associations with others; variety of activities engaged in.

51. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

52. To what degree are you satisfied with the FREE TIME aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

53. What percent of your friends are Air Force members?

- A. None
- B. 1-19%
- C. 20-39%
- D. 40-59%
- E. 60-79%
- F. 80-99%
- G. All

The following is a list of Federal holidays:

1 Jan 77 - New Year's Day	11 Oct 76 - Columbus Day
16 Feb 77 - President's Day	25 Oct 76 - Veterans' Day
31 May 76 - Memorial Day	25 Nov 76 - Thanksgiving Day
4 Jul 76 - Independence Day	25 Dec 76 - Christmas Day
6 Sep 76 - Labor day	

54. During the past year how many of these nine holidays were you not able to take off because you were required to be at work in a duty status?

- | | |
|-----------|-----------|
| A. 0 days | F. 5 days |
| B. 1 day | G. 6 days |
| C. 2 days | H. 7 days |
| D. 3 days | I. 8 days |
| E. 4 days | J. 9 days |

Please rate the degree of importance of your work to you and your degree of satisfaction with it based on the following description:

WORK: Doing work that is personally meaningful and important; pride in my work; job satisfaction; recognition for my efforts and my accomplishments on the job.

55. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

56. To what degree are you satisfied with the WORK aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

57. Which one of the following shows how much of the time you feel satisfied with your job?
- All the time
 - Most of the time
 - A good deal of the time
 - About half of the time
 - Occasionally
 - Seldom
 - Never
58. Choose the one of the following statements which best tells how well you like your job.
- I hate it
 - I dislike it
 - I don't like it
 - I am indifferent to it
 - I like it
 - I am enthusiastic about it
 - I love it
59. Which one of the following best tells how you feel about changing your job?
- I would quit this job at once if I could
 - I would take almost any other job in which I could earn as much as I am earning now
 - I would like to change both my job and my occupation
 - I would like to exchange my present job for another one
 - I am not eager to change my job, but I would do so if I could get a better job
 - I cannot think of any jobs for which I would exchange
 - I would not exchange my job for any other
60. Which one of the following shows how you think you compare with other people?
- No one likes his job better than I like mine
 - I like my job much better than most people like theirs
 - I like my job better than most people like theirs
 - I like my job about as well as most people like theirs
 - I dislike my job more than most people dislike theirs
 - I dislike my job much more than most people dislike theirs
 - No one dislikes his job more than I dislike mine

Listed below are six characteristics which could be present on any job. Using the scale below, indicate the degree to which you would like to have each characteristic present in your job.

	<u>Moderate</u> <u>or Less</u>		<u>High</u>		<u>Extremely</u> <u>High</u>	
61. Stimulating and challenging work	A	B	C	D	E	F G
62. Chances to exercise independent thought and action in my job	A	B	C	D	E	F G
63. Opportunities to learn new things from my work	A	B	C	D	E	F G
64. Opportunities to be creative and imaginative in my work	A	B	C	D	E	F G
65. Opportunities for personal growth and development in my job	A	B	C	D	E	F G
66. A sense of worthwhile accomplishment in my work	A	B	C	D	E	F G

67. Which one of the following factors do you consider the most essential for having a satisfying job?
- A. Challenging work
 - B. Recognition for my work
 - C. Sense of achievement
 - D. Encouragement to use initiative and creativity
 - E. Having responsibility for a job
 - F. Having a good supervisor
68. How do you evaluate your present Air Force job?
- A. Not at all challenging
 - B. Not very challenging
 - C. Somewhat challenging
 - D. Challenging
 - E. Very challenging
69. My present job makes good use of my training and ability.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
70. Do you think your present job is preparing you to assume future positions of greater responsibility?
- A. Definitely no
 - B. Probably no
 - C. Undecided
 - D. Probably yes
 - E. Definitely yes
71. For your next assignment, do you want a job which has greater responsibility than your current job?
- A. Definitely no
 - B. Probably no
 - C. Not sure
 - D. Probably yes
 - E. Definitely yes
72. Do you feel that the work you are now doing is appropriate to the grade you hold:
- A. My grade is much too high for the work I am doing
 - B. My grade is somewhat too high for the work I am doing
 - C. My grade is about right for the work I am doing
 - D. My grade is somewhat too low for the work I am doing
 - E. My grade is much too low for the work I am doing
73. What is your estimate of the average number of hours per week you spend on the job?
- A. Less than 30 hours
 - B. 31 - 35
 - C. 36 - 40
 - D. 41 - 45
 - E. 46 - 50
 - F. 51 - 55
 - G. 56 - 60
 - H. More than 60

74. The Air Force requires me to participate in too many activities that are not related to my job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
75. Air Force members should take more interest in mission accomplishment and less interest in their personal concerns.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
76. I wish that more Air Force members had a genuine concern for national security.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree

Listed below are 10 concepts which can be related to your Air Force life (questions 77-86). Rank them in order of their importance to you. Example: If you believe that "A comfortable life" (number 77) is the most important to you of the 10 concepts, you would mark an "A" for question 77 on your answer sheet. If you believe that "loyalty" is the second most important concept, you would mark a "B" for question 81 on your answer sheet. Continue ranking until you have marked a "J" for the concept of least importance to you.

- | | |
|-------------------------|-------------------------|
| A. Most important | F. Sixth most important |
| B. | G. |
| C. | H. |
| D. | I. |
| E. Fifth most important | J. Least important |

77. A comfortable life (a good salary, few worries about money)
78. A sense of accomplishment (making a meaningful contribution)
79. Family security (taking care of my family)
80. Individual freedom (independence, being free to choose)
81. Loyalty (dedication to military and its mission)
82. Personal recognition (having personal accomplishments recognized and rewarded)
83. National security (protection from attack, an effective military)
84. Integrity (absolute honesty, devotion to duty)
85. Trust (being able to depend on those around me, including my leaders, my peers, and my subordinates)
86. Job satisfaction (doing work that I like)

Please rate the degree of importance of leadership/supervision to you and your degree of satisfaction with it based on the following description:

LEADERSHIP/SUPERVISION: My supervisor has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

87. What degree of importance do you attach to the above? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

88. To what degree are you satisfied with the LEADERSHIP/SUPERVISION aspects of your life? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

89. What is your opinion of the leadership ability of your immediate supervisor?

- A. Excellent
- B. Above average
- C. Average
- D. Below average
- E. Poor

90. What is your opinion of the quality of leadership in the Air Force?

- A. Excellent
- B. Above average
- C. Average
- D. Below average
- E. Poor

91. The high degree of responsibility assigned to younger, lower ranking Air Force members places too great a strain upon them.

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree

Of the following descriptions of discipline, select the one which most nearly corresponds to your definition of what discipline should be on the part of an individual in a peacetime Air Force.

92. Discipline is the willingness of the individual to:

- A. Respond quickly and without question to the direct lawful orders of a superior
- B. Adapt his behavior to the expectations of the organization
- C. Self-direct his behavior so that it helps in the accomplishments of the mission of the organization.

93. What is your opinion of discipline in today's Air Force?

- A. Too strict
- B. Somewhat strict
- C. About right
- D. Somewhat lenient
- E. Too lenient

Listed below are 23 factors or policies which affect Air Force personnel. Using the scale listed immediately below, please rate each of the factors. Mark only one response for each item.

- A. Standard too strict, enforcement too strict
- B. Standard too strict, enforcement about right
- C. Standard too strict, enforcement too lax
- D. Standard about right, enforcement too strict
- E. Standard about right, enforcement about right
- F. Standard about right, enforcement too lax
- G. Standard too lax, enforcement too strict
- H. Standard too lax, enforcement about right
- I. Standard too lax, enforcement too lax

- 94. Overall personal appearance.
- 95. Wear of the uniform.
- 96. Haircuts.
- 97. Mustaches.
- 98. Beard policy.
- 99. Military courtesy and customs.
- 100. Personnel weight control program.
- 101. What my immediate supervisor expects of me.
- 102. My commander's policies and procedures.
- 103. Officer/enlisted on-the-job relationships.
- 104. Drills and ceremonies.
- 105. Respect for supervisors.
- 106. Safety procedures.
- 107. Working hours.
- 108. Leave procedures.
- 109. Living in on-base family housing
- 110. Living in on-base dormitories.
- 111. Quality of work expected on the job.
- 112. Quantity of work expected on the job.
- 113. Officer supervisor/subordinate relationships.
- 114. Enlisted supervisor/subordinate relationships.
- 115. Unit mission accomplishment.
- 116. Air Force life in general.

The following is a list of statements about leadership/supervision. Please indicate whether you agree or disagree with each statement using the scale shown.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Undecided</u>	<u>Agree</u>	<u>Strongly Agree</u>
117. The Air Force does a good job of keeping me informed about what is going on.	A	B	C	D	E
118. More supervision of member performance and behavior is needed at lower levels within the Air Force.	A	B	C	D	E
119. Persons in my work group encourage each other to work as a team.	A	B	C	D	E
120. My supervisor tries to get my ideas before making decisions that are important to me.	A	B	C	D	E
121. Persons in my work group offer each other new ideas for solving job-related problems.	A	B	C	D	E
122. My supervisor encourages the people in my work group to exchange opinions and ideas.	A	B	C	D	E
123. I would say that the lowest level supervisors in my organization usually have enough say or influence on what goes on.	A	B	C	D	E
124. When decisions are being made in my organization, the persons who will be affected most are asked for their ideas.	A	B	C	D	E
125. Persons who do not supervise others in my organization have an adequate amount of say or influence on what goes on.	A	B	C	D	E
126. Information is usually widely shared in my organization so that those who make the decisions will base their decisions on the best available know-how.	A	B	C	D	E
127. I get the information I need to do my job in the best possible way.	A	B	C	D	E
128. When I talk to people in my work group, they pay attention to what I am saying.	A	B	C	D	E
129. My supervisor is friendly and easy to approach.	A	B	C	D	E
130. My supervisor pays attention to what I have to say.	A	B	C	D	E

131. How often do you and your supervisor get together to set your personal performance objectives?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
132. How often are you given feedback from your supervisor about your job performance?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
133. Does your immediate supervisor give you recognition for a job well done?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Always
134. What kind of influence does your immediate supervisor have on your organization?
- A. Very favorable
 - B. Favorable
 - C. Neutral
 - D. Unfavorable
 - E. Very unfavorable
135. Are you given the freedom you need to do your job well?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Often
 - E. Always

Please rate the degree of importance of the concept of equity to you and your degree of satisfaction with it based on the following description:

EQUITY: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

136. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
	Moderate		High		Very High	
	Importance		Importance		Importance	

137. To what degree are you satisfied with the EQUITY aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
	Highly		Neutral		Highly	
	Dissatisfied				Satisfied	

138. An individual can get more of an even break in civilian life than in the Air Force.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

139. The Air Force promotion system is effective (i.e., the best qualified people are generally selected for promotion).

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree

140. What of the following best represents your opinion of the E-5/6/7 WAPS factors?

- A. Not enough weight is given to performance reports
- B. Not enough weight is given to tests
- C. Not enough weight is given to seniority
- D. Not enough weight is given to decorations
- E. Too much weight is given to performance reports
- F. Too much weight is given to tests
- G. Too much weight is given to seniority
- H. Too much weight is given to decorations
- I. No opinion

141. On the same jobs as men, do Air Force women tend to do more, less, or about the same amount of work?

- A. Much more
- B. More
- C. About the same
- D. Less
- E. Much less

142. How does your supervisor deal with your women co-workers?

A. Not applicable, there are no women in my unit

My supervisor is a woman and she:

- B. Expects more from the women workers than the men
- C. Treats men and women workers the same
- D. Gives women workers the easy jobs, and the hard jobs to men

My supervisor is a man and he:

- E. Expects more from the women workers than the men
- F. Treats men and women workers the same
- G. Gives women workers the easy jobs, and the hard jobs to the men

Please rate the degree of importance of personal growth to you and your degree of satisfaction with it based on the following description:

PERSONAL GROWTH: To be able to develop individual capacities, education/training; making full use of my abilities; the chance to further my potential.

143. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

144. To what degree are you satisfied with the PERSONAL GROWTH aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

145. For the most part, how suitable for your needs was the course material in the NCO Orientation Course (Phase I, NCO PME)?

- A. Excellent
- B. Good
- C. Fair
- D. Poor
- E. Have not attended the course
- F. Not applicable, I am an officer

146. Overall, my attendance at the NCO Orientation Course (Phase I, NCO PME) was a good, useful investment of my time and effort.

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree
- H. Have not attended the course
- I. Not applicable, I am an officer

147. Air Force training programs do not do a very good job of preparing people to get along with other people.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

148. Technical School Training does not do an adequate job of preparing an airman for his first duty assignment.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

149. Basic Military Training does not do an adequate job of preparing airmen for their first duty assignment.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

150. Today's Air Force training programs should devote some time to help prepare people to get along with each other better.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

151. Human Relations Education courses are effective in bringing about better working relations on the job.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of the concept of personal standing to you and your degree of satisfaction with it based on the following description:

PERSONAL STANDING: To be treated with respect; prestige; dignity; reputation; status.

152. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

153. To what degree are you satisfied with the PERSONAL STANDING aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

154. I have a lot of respect for most of the Senior NCOs (E7-E9) I know.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

155. Recent changes in Air Force personnel programs have been aimed at enhancing NCO prestige. Do you believe these efforts will be successful?

- A. Definitely yes
- B. Probably yes
- C. Undecided
- D. Probably no
- E. Definitely no

156. The prestige of the military has declined over the past several years.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

157. Most of the Senior NCOs (E7-E9) understand and are able to communicate with the people who work with them.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

158. Senior NCOs (E7-E9) are usually given jobs with less responsibility than they should have.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of health to you and your degree of satisfaction with it based on the following description:

HEALTH: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care services provided.

159. What degree of importance do you attach to the above?

- | | | | | | | |
|------------|--------|--------|------------|--------|--------|------------|
| A..... | B..... | C..... | D..... | E..... | F..... | G..... |
| Moderate | | | High | | | Very High |
| Importance | | | Importance | | | Importance |

160. To what degree are you satisfied with the HEALTH aspects of your life?

- | | | | | | | |
|--------------|--------|--------|---------|--------|--------|-----------|
| A..... | B..... | C..... | D..... | E..... | F..... | G..... |
| Highly | | | Neutral | | | Highly |
| Dissatisfied | | | | | | Satisfied |

161. Generally, how satisfied are you with the medical care you received at military medical facilities during the past 12 months?

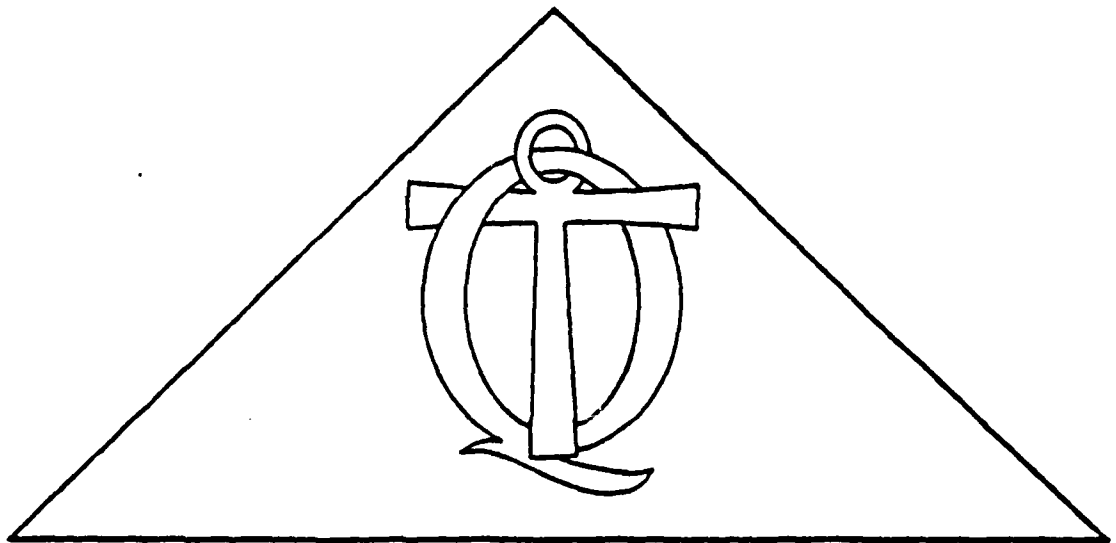
- A. Highly dissatisfied
- B. Dissatisfied
- C. Neither satisfied nor dissatisfied
- D. Satisfied
- E. Highly satisfied
- F. Not applicable, did not visit military medical facility in past 12 months

162. Generally, how satisfied are you with the medical care your children received in military medical facilities during the past 12 months?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neither satisfied nor dissatisfied
- D. Satisfied
- E. Highly satisfied
- F. Not applicable

163. Generally, the amount of time I have had to wait for treatment at military medical facilities during the past 12 months has been reasonable.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
 - F. Not applicable
164. Generally, medical personnel at military medical facilities are pleasant and concerned about patients.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
165. Approximately how many times did you and/or your children visit a military medical facility during the past 12 months.
- A. None
 - B. 1-4 times
 - C. 5-8 times
 - D. 9-12 times
 - E. More than 12 times

UNITED STATES AIR FORCE
QUALITY OF AIR FORCE LIFE
ACTIVE DUTY
AIR FORCE PERSONNEL SURVEY



THIRD EDITION

USAF SCN 80-24

Special Instructions: Items one and two below will be used to identify your base of assignment. Refer to paragraph two of your cover letter to find the two-letter code for your base. The first letter will be the response choice for you to mark for Item one on your answer sheet; the second letter will be the response choice for you to mark for Item two on your answer sheet. Now proceed to Item three and be sure that your answer is marked in the appropriate space for Item three on your answer sheet.

1. (Please mark the answer sheet with code described above.)

2. (Please mark the answer sheet with code described above.)

3. What is your present active duty grade?

- | | |
|--------------------------|---------------------------|
| A. Colonel | I. Senior Master Sergeant |
| B. Lieutenant Colonel | J. Master Sergeant |
| C. Major | K. Technical Sergeant |
| D. Captain | L. Staff Sergeant |
| E. First Lieutenant | M. Sergeant |
| F. Second Lieutenant | N. Senior Airman |
| G. Warrant Officer | O. Airman First Class |
| H. Chief Master Sergeant | P. Airman |
| | Q. Airman Basic |

4. What is your command of assignment (the command that maintains your personnel records)?

- | | |
|--|---|
| A. Alaskan Air Command | M. Air Force Data Automation Agency |
| B. U.S. Air Force Academy | N. Military Airlift Command |
| C. U.S. Air Forces in Europe | O. Pacific Air Forces |
| D. Air Force Accounting and Finance Center | P. Strategic Air Command |
| E. Air Force Logistics Command | Q. Tactical Air Command |
| F. Air Force Systems Command | R. Electronic Security Command |
| G. Air Reserve Personnel Center | S. Air Force Military Personnel Center |
| H. Air Training Command | T. Air Force Inspection and Safety Center |
| I. Air University | U. Air Force Audit Agency |
| J. Headquarters Air Force Reserve | V. Air Force Office of Special Investigations |
| K. Headquarters USAF | W. Other |
| L. Air Force Communications Command | |

5. How much total active federal military service have you completed?

- | | |
|------------------------------|------------------------------|
| A. Less than 1 year | O. 14 years but less than 15 |
| B. 1 year but less than 2 | P. 15 years but less than 16 |
| C. 2 years but less than 3 | Q. 16 years but less than 17 |
| D. 3 years but less than 4 | R. 17 years but less than 18 |
| E. 4 years but less than 5 | S. 18 years but less than 19 |
| F. 5 years but less than 6 | T. 19 years but less than 20 |
| G. 6 years but less than 7 | U. 20 years but less than 21 |
| H. 7 years but less than 8 | V. 21 years but less than 22 |
| I. 8 years but less than 9 | W. 22 years but less than 23 |
| J. 9 years but less than 10 | X. 23 years but less than 24 |
| K. 10 years but less than 11 | Y. 24 years but less than 25 |
| L. 11 years but less than 12 | Z. 25 years but less than 26 |
| M. 12 years but less than 13 | 1. 26 years but less than 27 |
| N. 13 years but less than 14 | 2. 27 years or more |

6. What is your highest level of education now (include accepted GED credits)?
- A. Some high school (did not graduate)
 - B. High school graduate (no college)
 - C. Trade or technical school (no college)
 - D. Some college, but less than one year
 - E. One year college, but less than two
 - F. Two years college, but less than three (including two-year associate degree)
 - G. Three years or more college, no degree
 - H. Registered nurse diploma program
 - I. College degree (BS, BA, or equivalent, except LL.B)
 - J. Graduate work beyond bachelor degree (no master's degree)
 - K. Master's degree
 - L. Postgraduate work beyond master's degree
 - M. Doctorate degree (includes LL.B, J.D., D.D.S., M.D., and D.V.M.)
7. What is your marital status?
- A. Married and spouse is not a member of a military service
 - B. Married and spouse is a member of a military service
 - C. Never been married
 - D. Divorced and not remarried
 - E. Legally separated
 - F. Widower/widow
8. What was the source of your commission?
- A. Not applicable, I am enlisted
 - B. OTS
 - C. OCS
 - D. ROTC
 - E. Aviation Cadet
 - F. Navigation Cadet
 - G. USAFA
 - H. USMA
 - I. USNA
 - J. Other
9. Which one of the following do you consider yourself?
- A. Black
 - B. Spanish Speaking Origin (Cuban, Puerto Rican, Mexican American, Spanish Descent)
 - C. American Indian
 - D. Asian Origin (Chinese, Japanese, Korean, Filipino, or Asian American)
 - E. White (Other than Spanish Speaking Origin)
 - F. Other
10. What is your sex?
- A. Male
 - B. Female

11. Which one of the following best describes your attitude toward making the Air Force a career?
- A. Definitely intend to make the Air Force a career
 - B. Most likely will make the Air Force a career
 - C. Undecided
 - D. Most likely will not make the Air Force a career
 - E. Definitely do not intend to make the Air Force a career
12. At the time you came on active duty in the Air Force, which one of the following best describes the attitude you had toward making the Air Force a career?
- A. Definitely intended to make the Air Force a career
 - B. Was inclined toward making the Air Force a career
 - C. Was undecided
 - D. Was not inclined toward an Air Force career
 - E. Definitely did not intend to make the Air Force a career
13. Which of the following best describes your attitude toward retirement at 20 years of military service?
- A. Not applicable have over 20 years service
 - B. Definitely will remain on active duty beyond 20 years
 - C. Probably will remain on active duty beyond 20 years
 - D. Undecided
 - E. Probably will retire at or soon after reaching 20 years
 - F. Definitely will retire at or soon after reaching 20 years
 - G. I will probably leave the service before 20 years of service
14. When does your active duty service commitment expire?
- A. No active duty service commitment
 - B. In less than 1 year
 - C. In greater than 1 year but less than 2 years
 - D. In greater than 2 years but less than 3 years
 - E. In greater than 3 years
15. How often do you think about quitting the Air force?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Often
 - E. Constantly
16. Enter the code for the first digit of your duty Air Force Specialty Code (AFSC) opposite item 16 on your answer sheet.
- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |
17. Enter the code for the second digit of your duty AFSC opposite item 17 on your answer sheet.
- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

18. Enter the code for the third digit of your date ABC opposite item 13 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

19. What is your current primary aeronautical rating?

- A. Pilot
- B. Navigator
- C. Flight Surgeon
- D. Other aeronautical rating
- E. Nonrated

The following questions address the subjects of economic standard and security. Please rate your degree of satisfaction with them based on the descriptions shown below.

ECONOMIC STANDARDS: satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

20. To what degree are you satisfied with the ECONOMIC STANDARD aspects of your life: (Select one of the seven points on the satisfaction scale.)

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly
Dissatisfied

Neutral

Highly
Satisfied

21. Most of the time my military service pay is adequate to cover the basic expenses with at least a little left over.

- A. Strongly disagree
- B. Disagree
- C. Slightly disagree
- D. Neither agree or disagree
- E. Slightly agree
- F. Agree
- G. Strongly agree

22. In the future I believe my military income will provide me with an acceptable standard of living

- A. Strongly disagree
- B. Disagree
- C. Slightly disagree
- D. Neither agree or disagree
- E. Slightly agree
- F. Agree
- G. Strongly agree

23. How do you see your future military pay keeping up with inflation as compared to the future pay of nongovernment civilians?

- A. Military much better able to keep up with inflation
- B. Military somewhat better able to keep up with inflation
- C. No difference between military and nongovernment civilians
- D. Nongovernment civilians somewhat better able to keep up with inflation
- E. Nongovernment civilians much better able to keep up with inflation

24. In comparison to two years ago, how has your overall financial condition changed (consider savings, investments, debts, possessions)?
- A. I am in much better condition
 - B. I am in somewhat better condition
 - C. I am in about the same condition
 - D. I am in somewhat worse condition
 - E. I am in much worse condition
25. The future financial security of myself and my family is of daily concern to me.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
26. Would you recommend Air Force Service to a young man/woman?
- A. Am inclined to recommend AF Service
 - B. Am slightly inclined to recommend AF Service
 - C. Would not recommend AF Service
 - D. Don't know
27. Which of the following best describes the impact of inflation on you over the last two years?
- A. Inflation has had relatively little effect on me
 - B. Have just been able to make ends meet
 - C. Have had to withdraw from my savings to make ends meet
 - D. Have gone deeper in debt to make ends meet
 - E. Both C and D above
 - F. None of the above
28. Do you or your dependents, if any, currently receive federal, state, county (public) assistance?
- A. No
 - B. Yes, food stamps only
 - C. Yes, monetary payment only
 - D. Yes, food stamps and monetary payment

ECONOMIC SECURITY: Guaranteed employment; retirement benefits; insurance; protection for self and family.

29. To what degree are you satisfied with the ECONOMIC SECURITY aspects of your life?

A . . .	B . . .	C . . .	D . . .	E . . .	F . . .	G
Highly			Neutral			Highly
Dissatisfied						Satisfied

30. Do you hold a second job?

A. No

Yes, I work (choose one answer below)

- B. 1-5 hours per week
- C. 6-10 hours per week
- D. 11-20 hours per week
- E. 21-30 hours per week
- F. Over 30 hours per week

31. Does your spouse work?

A. Not applicable, I am not married or I am legally separated

I am married and my spouse

- B. Resides with me, and has a paying job
- C. Resides with me, and does not work
- D. Does not reside with me, and has a paying job
- E. Does not reside with me, and does not work

32. The main reason that I have a second job, and/or that my spouse works is that we have to in order to make ends meet.

- A. Not applicable
- B. Strongly disagree
- C. Disagree
- D. Undecided
- E. Agree
- F. Strongly agree

33. How do you think your military pay (including all allowances and fringe benefits) compares with pay in civilian employment for similar work?

- A. Military pay is far higher than civilian
- B. Military pay is somewhat higher than civilian
- C. Both about equal
- D. Military pay is somewhat less than civilian
- E. Military pay is far less than civilian

34. If I left the Air Force tomorrow, I think it would be very difficult to get a job in private industry with pay, benefits, duties, and responsibilities comparable with those of my present job.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

35. An Air Force base is a desirable place to live.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of satisfaction with your free time based on the following description:

FREE TIME: Amount, use, and scheduling of free time alone, or in voluntary associations with others; variety of activities engaged in.

36. To what degree are you satisfied with the FREE TIME aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly
Dissatisfied

Neutral

Highly
Satisfied

Please rate the degree of satisfaction with your work based on the following description:

WORK: Doing work that is personally meaningful and important; pride in my work; job satisfaction; recognition for my efforts and my accomplishments on the job.

37. To what degree are you satisfied with the WORK aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly
Dissatisfied

Neutral

Highly
Satisfied

38. To what extent are you satisfied with the relationship you have with your peers?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neutral
- D. Satisfied
- E. Highly satisfied

39. To what extent are you satisfied with the relationship you have with subordinates?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neutral
- D. Satisfied
- E. Highly satisfied
- F. Not applicable

40. On most work days, how often does time seem to drag for you?

- A. About half the day or more
- B. About 1/3 of the day
- C. About 1/4 of the day
- D. About 1/8 of the day
- E. Time never seems to drag

41. Some people are completely involved in the job -- they are absorbed in it night and day. For others, their job is simply one of several interests. How involved do you feel in your job?

- A. Very little; my other interests are more absorbing
- B. Slightly involved
- C. Moderately involved; my job and my other interests are equally absorbing to me
- D. Strongly involved
- E. Very strongly involved; my work is the most absorbing interest in my life

42. How often do you do extra work for your job which is not really required of you?
- A. Almost every day
 - B. Several times a week
 - C. About once a week
 - D. Once every few weeks
 - E. About once a month or less
43. Would you say you work harder, less hard, or about the same as other people doing your type of work in your work organization?
- A. Much harder than most others
 - B. A little harder than most others
 - C. About the same as most others
 - D. A little less hard than most others
 - E. Much less hard than most others
44. Which one of the following shows how much of the time you feel satisfied with your job?
- A. All the time
 - B. Most of the time
 - C. A good deal of the time
 - D. About half of the time
 - E. Occasionally
 - F. Seldom
 - G. Never
45. Choose one of the following statements which best tells how well you like your job.
- A. I hate it
 - B. I dislike it
 - C. I don't like it
 - D. I am indifferent to it
 - E. I like it
 - F. I am enthusiastic about it
 - G. I love it
46. Which one of the following best tells how you feel about changing your job?
- A. I would quit this job at once if I could
 - B. I would take almost any other job in which I could earn as much as I am earning now
 - C. I would like to change both my job and my occupation
 - D. I would like to exchange my present job for another one
 - E. I am not eager to change my job, but I would do so if I could get a better job
 - F. I cannot think of any jobs for which I would exchange
 - G. I would not exchange my job for any other
47. Which one of the following shows how you think you compare with other people?
- A. No one likes this job better than I like mine
 - B. I like job much better than most people like theirs
 - C. I like my job better than most people like theirs
 - D. I like my job about as well as most people like theirs
 - E. I dislike my job more than most people dislike theirs
 - F. I dislike my job much more than most people dislike theirs
 - G. No one dislikes this job more than I dislike mine

48. How do you evaluate your present Air Force job?
- A. Not at all challenging
 - B. Not very challenging
 - C. Somewhat challenging
 - D. Challenging
 - E. Very challenging
49. Do you think your present job is preparing you to assume future positions of greater responsibility?
- A. Definitely not
 - B. Probably not
 - C. Undecided
 - D. Probably yes
 - E. Definitely yes
50. What is your estimate of the average number of hours per week you spend on the job?
- A. Less than 30 hours
 - B. 31-35
 - C. 36-40
 - D. 41-45
 - E. 46-50
 - F. 51-55
 - G. 56-60
 - H. More than 60
51. The Air Force requires me to participate in too many activities that are not related to my job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
52. Air Force members should take more interest in mission accomplishment and less interest in their personal concerns.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
53. To what extent do you have trust in senior Air Force decision makers?
- A. None at all
 - B. Very little extent
 - C. Some
 - D. Great extent
 - E. Undecided
54. To what extent do you have confidence in senior Air Force decision makers?
- A. None at all
 - B. Very little extent
 - C. Some
 - D. Great extent
 - E. Undecided

55. The AF is a good organization to work for today.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
56. Five years ago, the AF was a good organization in which to work.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
 - H. Not applicable, I have served less than five years
57. Considering just the trends you observe today in the Air Force, five years from now, the AF will be a good place to work.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
58. I wish that Air Force members had a genuine concern for national security.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
59. Select the one factor which TODAY would influence you the most to make the Air Force a career.
- A. Opportunity for training and education in the Air Force
 - B. My Air Force job (challenging, provides sense of accomplishment, etc)
 - C. Pay and allowances
 - D. Housing
 - E. Promotion system and opportunity
 - F. Fringe benefits (medical and dental care, BX, commissary, etc)
 - G. Leadership and supervision in the Air Force
 - H. Travel and new experiences
 - I. Have "say" in future assignments
 - J. Security of Air Force life
 - K. Air Force policies and procedures
 - L. The retirement system
 - M. Opportunity to serve my country
 - N. Some other factor
 - O. I do not intend to make the Air Force a career

60. Select the one factor which TODAY would influence you the most NOT to make the Air Force a career.

- A. Family separation
- B. My Air Force job (little challenge, little sense of accomplishment, etc)
- C. Pay and allowances
- D. Housing
- E. Promotion selection system
- F. Promotion opportunity
- G. Fringe benefits (medical and dental care, BX, commissary, etc)
- H. Leadership and supervision in the Air Force
- I. Frequent PCS moves
- J. Little "say" in future assignments
- K. Insecurity of Air Force life
- L. The people
- M. Air Force policies and procedures
- N. Some other factor
- O. Nothing unfavorable

This section consists of a list of 9 Career-related Outcomes. Consider each outcome separately and decide how desirable it would be to attain that outcome as a result of your career. In this section, please consider the outcomes independently of any specific career.

Indicate your desirability of attaining each outcome by selecting the appropriate letter on the scale following the outcome. The scale ranges from EXTREMELY UNDESIRABLE to EXTREMELY DESIRABLE with the midpoint (F) indicating that you are INDIFFERENT to the outcome. To be specific, DESIRABLE is taken to mean how much you would like to experience an outcome, and UNDESIRABLE means how much you would dislike experiencing it.

61. Earning a high salary.

A . . .	B . . .	C . . .	D . . .	E . . .	F . . .	G . . .	H . . .	I . . .	J . . .	K
EXTREMELY UNDESIRABLE					INDIFFERENT					EXTREMELY DESIRABLE

62. Promotions based on your job performance.

A . . .	B . . .	C . . .	D . . .	E . . .	F . . .	G . . .	H . . .	I . . .	J . . .	K
EXTREMELY UNDESIRABLE					INDIFFERENT					EXTREMELY DESIRABLE

63. An interesting and challenging job.

A . . .	B . . .	C . . .	D . . .	E . . .	F . . .	G . . .	H . . .	I . . .	J . . .	K
EXTREMELY UNDESIRABLE					INDIFFERENT					EXTREMELY DESIRABLE

64. A set of rules and regulations governing personal behavior in such areas as dress and appearance and associations with other members of the organization.

A . . .	B . . .	C . . .	D . . .	E . . .	F . . .	G . . .	H . . .	I . . .	J . . .	K
EXTREMELY UNDESIRABLE					INDIFFERENT					EXTREMELY DESIRABLE

65. A 20-year retirement program with a monthly pension of 40% of your total salary (This would be equivalent to approximately 50% of your base pay in the Air Force. By expressing it this way, comparisons between military and civilian pensions can be made.)

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

EXTREMELY
UNDESIRABLE

INDIFFERENT

EXTREMELY
DESIRABLE

66. Effective use of your abilities and training by your organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

EXTREMELY
UNDESIRABLE

INDIFFERENT

EXTREMELY
DESIRABLE

67. Extended separation from your immediate family (if married) or from home and friends (if unmarried).

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

EXTREMELY
UNDESIRABLE

INDIFFERENT

EXTREMELY
DESIRABLE

68. A favorable attitude on the part of your spouse (if married) or immediate family (if unmarried) regarding your career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

EXTREMELY
UNDESIRABLE

INDIFFERENT

EXTREMELY
DESIRABLE

69. The requirement to attain positions of increased rank and responsibility in order to remain a member of your organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

EXTREMELY
UNDESIRABLE

INDIFFERENT

EXTREMELY
DESIRABLE

The following statements concern the degree to which you perceive the 9 Career-related Outcomes are associated with (i.e., provided by) an Air Force career.

Following each statement, indicate one of the 11 responses on the scale ranging from COMPLETELY DISAGREE to COMPLETELY AGREE that best describes the extent of your agreement or disagreement with the statement. The midpoint of the scale (F) indicates that you are UNDECIDED or have NO OPINION about the correctness of the statement and its implied association.

70. An Air Force career will provide you with a high salary.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

71. Promotions are based on job performance in the Air Force.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

72. A career in the Air Force provides interesting and challenging jobs.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

73. In the Air Force, you will be subject to a set of rules and regulations governing personal behavior in areas such as dress and appearance and associations with other members of the organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

74. You will be able to retire from the Air Force after 20 years service with a monthly pension of 40% of your total salary (equivalent to approximately 50% of your base pay).

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

75. Effective use will be made of your abilities and training throughout an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

76. Extended separation from your immediate family (if married) or from home and friends (if unmarried) is one aspect of an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

77. Your spouse (if married) or your immediate family (if unmarried) has a favorable attitude regarding you having an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

78. An Air Force career will require you to attain positions of increased rank and responsibility in order to remain a member of your organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

The following statements concern the degree to which you perceive the 9 Career-related Outcomes are associated with (i.e., provided by) a civilian career.

Following each statement, please indicate one of the 11 responses on the scale ranging from COMPLETELY DISAGREE to COMPLETELY AGREE that best describes the extent of your agreement or disagreement with the statement. The midpoint of the scale (F) indicates that you are UNDECIDED or have NO OPINION about the correctness of the statement and its implied association.

79. A civilian career will provide you with a high salary.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY DISAGREE UNDECIDED COMPLETELY AGREE

80. Promotions are based on job performance in a civilian career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY DISAGREE UNDECIDED COMPLETELY AGREE

81. A career as a civilian provides interesting and challenging jobs.

[illegible]

82. In a civilian career you will be subject to a set of rules and regulations governing personal behavior in areas such as dress and appearance and associations with other members of the organization.

A	B	C	D	E	F	G	H	I	J	K
COMPLETELY DISAGREE					UNDECIDED					COMPLETELY AGREE

83. In a civilian career you will have a retirement program that offers a 20-year retirement with a monthly pension of 40% of your total salary.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

84. Effective use will be made of your abilities and training throughout a civilian career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY DISAGREE UNDECIDED COMPLETELY AGREE

85. Extended separation from your immediate family (if married) or from home and friends (if unmarried) is one aspect of a civilian career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY DISAGREE UNDECIDED COMPLETELY AGREE

86. Your spouse (if married) or your immediate family (if unmarried) has a favorable attitude regarding you having a civilian career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

87. A civilian career will require you to attain positions of increased rank and responsibility in order to remain a member of your organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K

COMPLETELY
DISAGREE

UNDECIDED

COMPLETELY
AGREE

88. What are your intentions regarding staying in or transferring from your present organization for reasons other than normal PCS?

A B C D E F G

I definitely want to transfer	I most likely will try to trans- fer	I am leaning toward trans- ferring	I am undecided	I am leaning toward staying	I most likely will try to stay	I definitely want to stay
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Please rate your degree of satisfaction with leadership/supervision based on the following description:

LEADERSHIP/SUPERVISION: My supervisor has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

89. To what degree are you satisfied with the LEADERSHIP/SUPERVISION aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

90. To what degree are you satisfied with the relationship you have with your superiors?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neutral
- D. Satisfied
- E. Highly satisfied

91. What is your opinion of the leadership ability of your immediate supervisor?

- A. Excellent
- B. Above average
- C. Average
- D. Below average
- E. Poor

92. What is your opinion of the quality of leadership in the Air Force?
- A. Excellent
 - B. Above average
 - C. Average
 - D. Below average
 - E. Poor
93. What is your opinion of discipline in today's Air Force?
- A. Too strict
 - B. Somewhat strict
 - C. About right
 - D. Somewhat lenient
 - E. Too lenient
94. More supervision of member performance and behavior is needed at lower levels within the Air Force.
- A B C D E
- | | | | | |
|----------|----------|-----------|-------|----------|
| STRONGLY | DISAGREE | UNDECIDED | AGREE | STRONGLY |
| DISAGREE | | | | AGREE |
95. How often do you and your supervisor get together to set your personal performance objectives?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
96. How often are you given feedback from your supervisor about your job performance?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
97. How often does your immediate supervisor give you recognition for a job well done?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Always
98. How often are you given the freedom you need to do your job well?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Often
 - E. Always

Please rate your degree of satisfaction with equity based on the following description:

EQUITY: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

99. To what degree are you satisfied with the EQUITY aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

100. An individual can get more of an even break in civilian life than in the Air Force.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

101. The Air Force promotion system is effective (i.e., the best qualified people are generally selected for promotion).

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree

102. On the same jobs as men, do Air Force women tend to do more, less, or about the same amount of work?

- A. Much more
- B. More
- C. About the same
- D. Less
- E. Much less

103. How does your supervisor deal with your women co-workers?

- A. Not applicable, there are no women in my unit

My supervisor is a woman and she:

- B. Expects more from the women workers than the men
- C. Treats men and women workers the same
- D. Expects more from the men workers than the women

My supervisor is a man and he:

- E. Expects more from the women workers than the men
- F. Treats men and women workers the same
- G. Expects more from the men workers than the women

Please rate your degree of satisfaction with personal growth based on the following description:

PERSONAL GROWTH: To be able to develop individual capacities; education/training; making full use of my abilities; the chance to further my potential.

104. To what degree are you satisfied with the PERSONAL GROWTH aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY DISSATISFIED	NEUTRAL	HIGHLY SATISFIED
------------------------	---------	---------------------

Please rate your degree of satisfaction with personal standing based on the following description:

PERSONAL STANDING: To be treated with respect; prestige; dignity; reputation; status.

105. To what degree are you satisfied with the PERSONAL STANDING aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY DISSATISFIED	NEUTRAL	HIGHLY SATISFIED
------------------------	---------	---------------------

106. The prestige of the military today is good.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

107. The prestige of the military has declined over the past several years.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

108. Senior NCOs (E7-E9) are usually given jobs with less responsibility than they should have.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate your degree of satisfaction with health based on the following description:

HEALTH: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care services provided.

109. To what degree are you satisfied with the HEALTH aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY DISSATISFIED	NEUTRAL	HIGHLY SATISFIED
------------------------	---------	---------------------

110. Generally, how satisfied are you with the medical care you received at military medical facilities during the past 12 months?
- A. Highly dissatisfied
 - B. Dissatisfied
 - C. Neither satisfied nor dissatisfied
 - D. Satisfied
 - E. Highly satisfied
 - F. Not applicable, did not visit military medical facility in past 12 months
111. Generally, how satisfied are you with the medical care your children received in military medical facilities during the past 12 months?
- A. Highly dissatisfied
 - B. Dissatisfied
 - C. Neither satisfied nor dissatisfied
 - D. Satisfied
 - E. Highly satisfied
 - F. Not applicable
112. Generally, the amount of time I have had to wait for treatment at military medical facilities during the past 12 months has been reasonable.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
 - F. Not applicable
113. Generally, medical personnel at military medical facilities are pleasant and concerned about patients.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
114. Approximately how many times did you and/or your children visit a military medical facility during the past 12 months?
- A. None
 - B. 1-4 times
 - C. 5-8 times
 - D. 9-12 times
 - E. More than 12 times
115. Short tours and long tours count equally for overseas tour credit. Although certain overseas areas are more popular than others, given the same tour length, do you feel more overseas credit should be given to service in hard-to-man areas than service in more popular areas?
- A. Yes, 1 1/2 for 1
 - B. Yes, 2 for 1
 - C. Yes, 3 for 1
 - D. No
 - E. Undecided
116. Would you be more likely to volunteer for hard-to-man overseas duty if you could get extra credit for such duty?
- A. Yes
 - B. No
 - C. Undecided

117. Overseas volunteers may now specify only a country of choice. Would you be more likely to volunteer for overseas duty if you were assured of receiving the specific base of your choice?

- A. Yes
- B. No
- C. Undecided

118. If you were authorized to apply for an overseas Base of Preference (BOP), would you apply?

- A. Yes
- B. No
- C. Undecided

119. Would you accept a hard-to-man short tour if upon completion of the short tour you were guaranteed a Consecutive Overseas Tour (COT) in a long tour area of your choice?

- A. Yes
- B. No
- C. Undecided

120. If you were informed of all the overseas assignment options open to your AFSC and grade, would you more likely volunteer for overseas duty?

- A. Yes, definitely, I would more likely volunteer
- B. Yes, probably, I would more likely volunteer
- C. Yes, to a slight extent I would more likely volunteer
- D. No, I would not volunteer
- E. Undecided

121. Listed below are a number of alternatives for priority matching overseas returnees to available assignments. Which alternative do you prefer?

Alternative A

- 1st Consideration: Short Tour Returnees
- 2nd Consideration: Long Tour Returnees (Unaccompanied)
- 3rd Consideration: Long Tour Returnees (Accompanied)

Alternative B

- 1st Consideration: Short Tour Returnees and Long Tour Returnees (Unaccompanied) considered equally
- 2nd Consideration: Long Tour Returnees (Accompanied)

Alternative C

- 1st Consideration: Short Tour Returnees
- 2nd Consideration: Long Tour Returnees (Unaccompanied and Accompanied) considered equally

Alternative D

- 1st Consideration: Long Tour Returnees (Unaccompanied)
- 2nd Consideration: Remote Tour Returnees
- 3rd Consideration: Long Tour Returnees (Accompanied)

Alternative E

All overseas returnees receive equal consideration

FAMILY PATTERNS: Questions 122 to 134 are to be completed only by those who have a spouse. Questions 135 to 144 are to be completed only by those who have children.

122. My spouse is:

- A. Military (USAF)
- B. Military (Other)
- C. Civilian

123. My spouse has a career or is pursuing a career in the sense that he/she has prepared himself/herself with special skills, has a commitment to that line of work and has some future plans for development of that career.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
124. What is your feeling toward your spouse having a job/career?
- A. Prefer my spouse to work outside the home
 - B. All right as long as my spouse prefers to work and there are no seriously negative effects
 - C. No opinion
 - D. Would prefer he/she not work outside the home
 - E. Prefer my spouse not pursue a career
125. Would you say that your spouse's career is compatible with your military career?
- A. Very compatible
 - B. Somewhat compatible
 - C. Slightly compatible
 - D. Not compatible
126. Have you ever mentioned your spouse's career to your resource manager either in discussion or on your assignment preference form?
- A. Yes
 - B. No
127. Resource managers should consider civilian spouse's career when assigning the military member.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
128. How many times have you been separated for more than a month from your family as a result of your military duty?
- A. 0
 - B. 1-2
 - C. 3-4
 - D. 5-6
 - E. In excess of 6 times
129. What is the primary reason your spouse works outside the home?
- A. Head of household
 - B. Required income
 - C. Nice to have extra income
 - D. Independence
 - E. Self-esteem
 - F. Enjoyment in work itself
 - G. Personal desire to work
 - H. Not applicable, spouse does not work outside the home

130. If you are a two-career family, how many years have you maintained the two-career family lifestyle?

- A. 1 but less than 2 years
- B. 2 but less than 3 years
- C. 3 but less than 4 years
- D. 4 but less than 5 years
- E. More than 5 years

131. How many hours per week does your spouse spend on the job?

- A. Less than 40 hours
- B. 40 but less than 50 hours
- C. 50 but less than 60 hours
- D. Over 60 hours

132. Independent of your spouse's feelings about an Air Force career, which would you prefer?

- A. To stay in the Air Force until retirement
- B. To leave the Air Force before retirement
- C. Undecided

133. Have you and your spouse agreed upon his/her career plans?

- A. Yes
- B. No

134. Have you and your spouse agreed upon your career plans?

- A. Yes
- B. No

Questions 135 to 144 are to be completed only by those having children.

135. Are you a single member parent?

- A. Yes
- B. No

136. How many children do you have living at home?

- A. 1
- B. 2
- C. 3
- D. 4
- E. More than 4

137. What is the age of your youngest child?

- A. Preschool 0-5 years
- B. Young school age 6-12 years
- C. Teenager 13-18
- D. Over 18

138. Would you use a professionally run childcare facility which was available for use 24 hours a day whenever you needed it?

- A. Yes
- B. No

139. To what degree would you say you need such a facility?

- A. To a great extent
- B. To some extent
- C. Maybe
- D. To a little extent
- E. Not at all

Listed below are a number of factors which may represent your objections to overseas duty. Use Items 140-144 to rank your objections. First, select the reason which represents your most important objection and mark the appropriate letter on your answer sheet for Item 140. Then select the second most important reason and continue ranking until the least important reason is marked for Item 144.

- A. Financial costs (costs of relocation, living overseas or loss of additional income from second job/spouse's employment).
- B. Family considerations (school, medical care, separation from parents, etc).
- C. Quality of life overseas (housing, support facilities, cultural differences).
- D. Inability to have my spouse/family accompany me.
- E. I'm satisfied where I am and don't want to move.
- F. A reason other than those listed above.

140. ___ First ranked reason (most important)

141. ___ Second ranked reason

142. ___ Third ranked reason

143. ___ Fourth ranked reason

144. ___ Fifth ranked reason (least important)

APPENDIX B
LIST OF WEIGHTS UTILIZED IN ANALYSIS

1977
List of Weights Used in Analysis
Enlisted Personnel

<u>Grade</u>	<u>Total Strength</u>	<u>Sample Strength</u>	<u>Weighting Factor</u>
CHSGT	4727	790	5.98
SHSGT	9502	764	12.44
MSGT	33569	801	41.91
TSGT	55108	667	82.62
SSGT	96557	675	143.05
SGT & SRA	117201	626	187.22
A1C	94690	782	121.09
AMN	36932	202	182.83
AB	29598	521	56.81

NOTE: Warrant Officers were not used in weighting criteria.

1977

List of Weights Used in Analysis

Male Officer Personnel

<u>Grade - Race</u>	<u>Total Strength</u>	<u>Sample Strength</u>	<u>Weighting Factor</u>
Col - B	76	16	4.75
Col - W	5264	771	6.86
Col - O	33	17	2.06
Lt Col - B	179	29	6.17
Lt Col - W	12310	818	15.16
Lt Col - O	107	27	3.96
Maj - B	397	64	6.13
Maj - W	17820	628	28.37
Maj - O	197	25	7.88
Capt - B	897	94	9.43
Capt - W	36692	629	58.33
Capt - O	319	40	1.97
1Lt - B	557	56	9.95
1Lt - W	10277	451	22.79
1Lt - O	113	32	3.53
2Lt - B	488	62	7.87
2Lt - W	6695	386	7.34
2Lt - O	103	38	2.71

NOTE: B = Black Ethnic Background
W = White Ethnic Background
O = Other Ethnic Backgrounds

1977
List of Weights Used in Analysis

Female Officer Personnel

<u>Grade - Race</u>	<u>Total Strength</u>	<u>Sample Strength</u>	<u>Weighting Factor</u>
Col - B	2	2	--
Col - W	50	15	3.33
Col - O	0	2	--
Lt Col - B	16	8	2.00
Lt Col - W	282	25	11.88
Lt Col - O	2	5	--
Maj - B	40	10	4.00
Maj - W	570	43	13.25
Maj - O	20	14	2.14
Capt - B	86	10	8.60
Capt - W	1785	90	19.83
Capt - O	28	11	2.54
1Lt - B	133	22	6.04
1Lt - W	1315	105	12.52
1Lt - O	13	15	--
2Lt - B	96	22	4.30
2Lt - W	733	57	2.36
2Lt - O	14	15	--

NOTE: B = Black Ethnic Background
W = White Ethnic Background
O = Other Ethnic Backgrounds

1980
List of Weights Used in the Study

Grade	Total Strength	Sample Strength	Weighting Factors
Colonel	5136	435	11.806896
Lt. Colonel	12627	440	28.697727
Major	18141	398	45.580402
Captain	36900	398	97.713567
1 Lt	9571	322	29.723602
2 Lt	12938	348	37.17816
Subtotal	95313	2341	
ChSgt	4511	424	10.63915
SMsGt	8863	451	19.651884
MSgt	33083	454	72.870044
TSgt	51994	410	126.81463
SSgt	99921	371	269.32884
Sgt & SrAmn	101688	358	284.04469
AlC	100328	460	218.10434
Amn	27209	84	323.91666
Amn Basic	31615	12	2634.5833
Subtotal	459212	3024	
Total	554525	5365	.0096749

APPENDIX C
LIST OF INTERACTIVE TERMS USED IN THIS STUDY

List of Interactive Terms Used in this Study

<u>Interactive Term</u>	<u>Components</u>
QG	Job Satisfaction & Job Autonomy
QH	Job Autonomy & Health Care Satisfaction
QI	Health Care Satisfaction & Institutionalism
QJ	Institutionalism & Economic Standard Satisfaction
OK	Economic Standard Satisfaction & Free Time Satisfaction
QL	Job Satisfaction & Health Care Satisfaction
QM	Job Autonomy & Institutionalism
QN	Health Care Satisfaction & Economic Standard Satisfaction
QO	Institutionalism & Free Time Satisfaction
QP	Job Satisfaction & Institutionalism
QQ	Job Autonomy & Economic Standard Satisfaction
QR	Health Care Satisfaction & Free Time Satisfaction
QS	Job Satisfaction & Economic Standard Satisfaction
QT	Job Autonomy & Free Time Satisfaction
QU	Job Satisfaction & Free Time Satisfaction

SELECTED BIBLIOGRAPHY

REFERENCES CITED

1. "AFA Policy Paper: Defense Manpower Issues," Air Force Magazine, pp. 50-53, November 1979.
2. Air Force Military Personnel Center. Airman Exit Report. Officer-Airman Exit Survey. January-March 1981.
3. Albanese, Robert A. Managing: Toward Accountability for Performance (Third edition). Homewood IL: Richard D. Irwin, Inc., 1981.
4. Allen, General Lew, Jr. "The Military Role — A New Awareness," Air Force Magazine, p. 74, May 1981.
5. Alley, William E., Chief, Force Utilization Branch, AF HRL. Letter, subject: Career Intent as a Surrogate for Actual Turnover, to Captains Lazar and Maloney, March 1982.
6. _____, and Bruce R. Gould. Feasibility of Estimating Personnel Turnover from Survey Data — A Longitudinal Study. Report No. TR-75-54. Brooks AFB TX: Air Force Human Resources Laboratory, October 1975.
7. Atchinson, T. J., and E. A. Lefferts, "The Prediction of Turnover Using Herzberg's Job Satisfaction Technique," Personnel Psychology, pp. 53-64, 1972.
8. Bircher, John. Health Policy and Programs Report: Physician Retention and Outlook With An Analysis by Specialty. Report No. 110-80. Report to the USAF Surgeon General, June 1981.
9. Brayfield, A. H., and W. H. Crockett. "Employee Attitudes and Employee Performance," Psychological Bulletin, 52:346-424, 1955.
10. Davis, General Bennie L. "The Linchpin of the Air Force Readiness," Air Force Magazine, p. 50, January 1981.
11. Gates, Ed. "Engineering a Response to the S&T Shortfall," Air Force Magazine, 63:69, 1980.
12. Gulick, Clyde E., and Henry E. Laakman. "An Analysis of Factors Influencing the Turnover of USAF Pilots in the Six to Eleven Year Group." Unpublished Master's Thesis. LSSR 4-80, AFIT/LS, Wright-Patterson AFB OH, June 1980.

13. Hagman, Robert A. "An Analysis of the Institutional-Occupational Orientation Prediction Variables on the 1977 USAF Quality of Life Survey." Unpublished Master's Thesis. Air Force Institute of Technology, Wright-Patterson AFB OH, September 1978. ADA 065893.
14. Harman, Harry H. Modern Factor Analysis. Chicago: The University of Chicago Press, 1967.
15. Headquarters USAF. United States Air Force Quality of Air Force Life Survey. Survey Control Number (SCN) 75-151. June 1975.
16. _____. United States Air Force Quality of Air Force Life Survey (Second edition). SCN 77-37, March 1977.
17. _____. United States Air Force Quality of Air Force Life Survey (Third edition). SCN 80-24, 1980.
18. Jamal, Muhammad. "Shift Work Related to Job Attitudes, Social Participation and Withdrawal Behavior: A Study of Nurses and Industrial Workers," Personnel Psychology, pp. 535-547, Autumn 1981.
19. Krackhardt, D., John McKenna, Lyman Porter, and Richard Steers. "Supervisory Behavior and Employee Turnover: A Field Experiment," Academy of Management Journal, 22:249, 1981.
20. Kraut, Allen I. "Predicting Turnover of Employees From Measured Job Attitudes," Organizational Behavior and Human Performance, pp. 233-243, April 1975.
21. LaRocco, J. M., and E. K. Gunderson. "Identifying Determinants of Retention Decisions," Personnel Psychology, pp. 199-215, Summer 1977.
22. Lawler, E. D. Pay and Organizational Effectiveness: A Psychological View. New York: McGraw-Hill, 1971.
23. Locke, E. A. "The Nature and Consequences of Job Satisfaction," In Handbook of Industrial and Organizational Psychology, ed. M. D. Dunnette. Chicago: Rand-McNally, 1976.
24. March, J. G., and H. A. Simon. Organizations. New York: Wiley, 1958.
25. Martin, Thomas N. "A Contextual Model of Employee Turnover Intentions," Academy of Management Journal, 22:313-324, 1979.

26. ———. "A Study of Reducing Turnover Costs," In Academy of Management Proceedings 1977:37th Annual Meeting, ed. Robert L. Taylor, Michael J. O'Connell, Robert A. Zawack, and D. D. Warrick. Orlando FL: Academy of Management, 1977.
27. ———. "Integration of Intent to Leave and OD Interventions," California Management Review, 23:81-86, Fall 1980.
28. McClave, James T., and P. George Benson. Statistics for Business and Economics. San Francisco: Dellen Publishing Company, 1979.
29. McNichols, Lieutenant Colonel Charles W., USAF. Professor, School of Engineering, Air Force Institute of Technology, Wright-Patterson AFB OH. Personal Interview. 8 March 1982.
30. McNichols, Charles W., T. Roger Manley, and Michael J. Stahl. 1980 United States Air Force Quality of Life Study: A Quick Look Report, (AFIT Technical Report No. TR-80-2). Wright-Patterson AFB OH: Air Force Institute of Technology, July 1980.
31. ———, Michael J. Stahl, and T. Roger Manley. "A Validation of Hoppock's Job Satisfaction Measure," Academy of Management Journal, 21:737-742, 1978.
32. Miller, H., R. Katerberg, and C. Hulin. "Evaluation of the Mobley, Horner, and Hollingsworth Model of Employee Turnover," Journal of Applied Psychology, 64:509-517, 1979.
33. Mobley, William H. "Intermediate Linkages in the Relationship Between Job Satisfaction and Employee Turnover," Journal of Applied Psychology, 62:237-240, 1977.
34. ———. "Some Unanswered Questions in Turnover and Withdrawal Research," Academy of Management Review, 7:111-116, 1982.
35. ———, R. W. Griffeth, H. H. Hand, and B. M. Meglino. "Analysis of the Employee Turnover Process," Psychological Bulletin, 86:493-522, May 1979.
36. ———, W. S. Horner, and A. Hollingsworth. "An Evaluation of Precursors of Hospital Employee Turnover," Journal of Applied Psychology, 63:408-414, 1978.
37. Moskos, Charles C., Jr. "It's a New Ball Game: Changing Expectations of Military Service," In First Term Enlisted Attrition, Volume I: Papers, ed. Wallace Sinaiko. Washington DC: Smithsonian Institution, 1977.

38. _____. "From Institution to Occupation: Trends in Military Organization," Armed Forces and Society, November 1977, pp. 41-50.
39. Newman, Colonel M. O., Director of Personnel Program Actions, HQ AFMPC/MPCA. Letter, subject: Enlisted Skill Shortage — Promotion Modification, to all CBPO's, 9 October 1981.
40. Nicholson, Nigel, Toby Wall, and Joe Lischeron. "The Predictability of Absence and Propensity to Leave From Employee's Job Satisfaction and Attitudes Toward Influence in Decision Making," Human Relations, pp. 499-514, June 1977.
41. Nfe, Normal H., et al. Statistical Package for the Social Sciences. 2nd ed. New York NY: McGraw-Hill Book Co., 1975.
42. Officer Retention Up, But Shortages Noted," Air Force Times, p. 19, 4 May 1981.
43. Personnel Research Division. Retention of Scientists and Engineers in the Air Force: A Modified Model for Interpreting Correlates of Career Intent. Document No. TR-70-27. Lackland AFB TX: Human Resources Laboratory, June 1970.
44. Porter, L. W., and R. M. Steers. "Organizational Work and Personal Factors in Employee Turnover and Absenteeism," Psychological Bulletin, 80:151-176, 1973.
45. _____, R. M. Steers, R. Mowday, and P. Boulian. "Organizational Commitment, Job Satisfaction, and Turnover Among Psychiatric Technicians," Journal of Applied Psychology, 59:603-609, 1974.
46. _____, W. Crampon, and F. Smith. "Organizational Commitment and Managerial Turnover: A Longitudinal Study," Organizational Behavior and Human Performance, 15:87-98, 1976.
47. Price, James L. The Study of Turnover. Ames IA: The Iowa State University Press, 1977.
48. _____, and A. C. Bluedorn. "Intent to Leave as a Measure of Turnover," Paper presented at the Annual Academy of Meeting, Orlando FL, 1977.